NZART

CALL BOOK

AMATEUR
RADIO
CALLSIGNS

RADIO
& TV
INFORMATION

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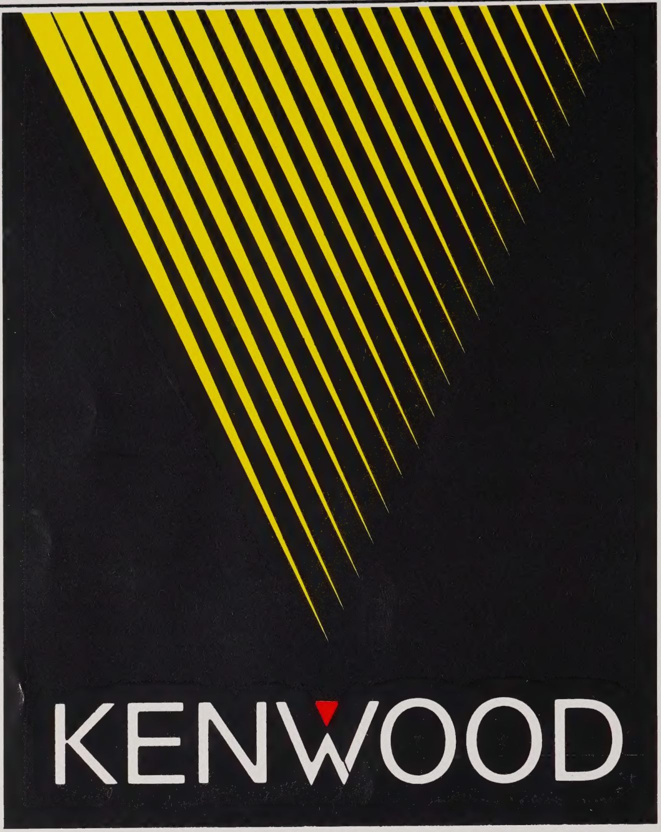
New Zealand 1990

OFFICIAL PROJECT



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AMATEUR RADIO

What is Amateur Radio?

Amateur Radio, also affectionately known as "ham radio", is a hobby of constructing, experimenting and communicating. In New Zealand hams are licensed by the Radio Frequency Service. Once licenced, an amateur can operate radio equipment from home, from their vehicle and from anywhere in New Zealand. A number of radio frequencies have been set aside for Amateur Radio use. On these frequencies a ham can talk across town or around the world. The scope and possibilities are endless—from sending TV pictures to operating through Amateur Radio satellites.

Who can be Hams?

Just about anyone can become a ham. Some famous people such as Kings and Prime Ministers are hams, but most are just people from all walks of life who like communicating. Young people find Amateur Radio a great training ground, older people find "hamming" an absorbing retirement hobby.

In fact Amateur Radio is more than a hobby, it is a service. Hams provide their equipment and operating skills whenever the need arises—such as for Civil Defence emergencies and Search and Rescue operations.

How do I become a Ham?

Passing a ham licence is quite easy. For a Novice Licence you are required to obtain a 30 per cent pass in a test on radio theory, a 50 per cent pass in understanding Radio Regulations and a morse code sending and receiving test at six words per minute.

Where do I get more information?

The New Zealand Association of Radio Transmitters (Inc.) is a non-profit association of Amateur Radio Operators. NZART has clubs and instructors in most larger cities and towns. For more information on Amateur Radio and details of club and licensing courses near you, contact:

The General Secretary, NZART, P.O. Box 40-525, Upper Hutt.

New Zealand Association of Radio Transmitters

INC.

(Founder Member of the International Amateur Radio Union Region III Association)

Mail to: GENERAL SECRETARY, NZART HEADQUARTERS, P.O. BOX 40-525, UPPER HUTT, NEW ZEALAND.

PLEASE UPDATE MY EXISTING MEMBERSHIP RECORD AS FOLLOWS ☐ PLEASE ENROL ME AS A NEW MEMBER ☐

TRANSMITTING ☐ NON-TRANSMITTING ☐ JUNIOR ☐ FAMILY ☐ OVERSEAS ☐

ASSOCIATE ☐ LISTENER CALL ☐

MR MS MRS MISS	INITIALS	SURNAME
ADDRESS		
POST CODE	MEMBERSHIP NO.*	DATE

CALLSIGN
PREFERRED BRANCH, NAME OR NO.
PLEASE FIND ENCLOSED $
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CALL BOOK 1990

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Cover: 1990 will be an exciting year for New Zealanders. Our cover features the Kotuku (White Heron) logo of the 1990 celebrations. NZART *Call Book 1990* is an Official 1990 Project. Several other Amateur Radio activities which are 1990 Projects will be described in *Break-In* during the year.

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NZART PUBLICATIONS

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WEISS History of QRP	$17.40	$22.60
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NON-MEMBERS use right-hand price columns. OVERSEAS MEMBERS should delete GST from their orders (divide by 9).
MEMBERS use left-hand price columns. It is important that you supply a recent *Break-In* label when ordering.
Some publications may be out of stock at time of ordering. All orders will be recorded and advice of approximate delivery date given.

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NZART (Inc.)
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International Representation with membership in the International Amateur Radio Union

Amateur Repeater Service co-ordination by the Frequency Management and Technical Advisory Group

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Spectrum Bandplanning for Council by the Frequency Management and Technical Advisory Group

Public Service Involvement by the Amateur Radio Emergency Corps for Civil Defence and Search and Rescue

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Teletext for current news and promotion

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Slow Morse Practise for Amateur Radio Operators' Certificate

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Special Projects for funds for promoting radio in developing countries

Legal Advice on tower permits

Branch Services constitutional, legal, financial, etc.

Equipment Insurance Schedule at special rates

Editorial

For 1990 the word for Call Book is "new". Our new typesetters "TypeShop Ltd" have undertaken the task of resetting all the *Call Book* material. As with *Break- In* this year, there has been a change to a new page size and finally our new printing firm is D. N.Adams Ltd. A major benefit of the new printer is a substantial reduction in cost of production which has been passed on to members as a three dollar reduction in the price of additional copies of *Call Book* for members.

Over the last few years the method of maintaining the *Call Book* callsign listings has changed completely. In 1986 the amendments were all recorded by hand and sent to the typesetter, who in turn entered each one into his database. A full listing was then produced for proof-reading. When any errors in the setting had been located the list was returned to the typesetter for corrections. Finally at this stage, we received page proofs. Over the following three years we have built up a database including all ZL callsigns, Overseas Members and Non-Transmitting Members. Four digit post codes have also been added to all New Zealand addresses. This year as each amendment was received, the database was continually updated. Using the programs available to us we were able to cross-reference, and thereby avoid many problems which could have arisen. All amendments were rechecked before a final disk was prepared for the typesetter, who was quickly and easily able to produce the pages as they now appear in *Call Book*. As a matter of interest, the following table shows the figures for callsign alterations and address changes over the last 12 months.

Area	**1989** *Call Book*	**Additions**	**Deletions**	**1990** *Call Book*	**Amendments**
ZL1	2552	170	154	2568	216
ZL2	2111	131	142	2100	174
ZL3	976	55	83	948	87
ZL4	626	43	45	624	42
Total	6265	399	424	6240	519

A major problem, which has led to numerous complaints, is that of the details from the listing we receive from the Radio Frequency Service. We have noticed that this listing is, in some cases, different to those held in local RFS Offices. After investigation it was found that two seperate computers are in operation in the RFS Head Office. It would appear that occasionally alterations have been made to the system supplying information to the local RFS Offices and not the other, from which we obtain our information. We have now been advised that work is in progress to combine the two systems and so provide a more accurate reference for the preparation of Callbook 1991. Members are reminded that, for any change of address, both the RFS and NZART should be advised. A Change of Address form is printed on page14. A list of corrections to any errors contained in Callbook 1990 will appear in August Break-In. Please advise any errors to "Callbook Editor", P.O.Box 1733, Christchurch by July 10, 1990.

Many of the telephone numbers contained in Callbook (mainly in the Branch Directory and AREC Section Leaders listings) will change during the year. Where possible we have printed the phone number that will be applicable for most of the year ie:my telephone number, which is currently (03) 527-862 will become (03) 352-7862 on the 30/06/90 and is therefore shown as the latter.

Once again *Call Book* includes contributions from many people, both amateur and non-amateur. For the first time three contributions have been received on disk, which reduces the effort of typesetting and proof-reading. Hopefully this number will increase in future years. My thanks go to all contributors without whom Callbook would merely be a listing of callsigns. Special thanks must also go to Cliff and Clare from TypeShop and to those who assisted with a large amount of proof-reading.

Ian MacPherson
Call Book Editor

NZART INFORMATION SECTION

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—Application for membership
—Subscription renewals
—Publications department
—Change of address (see page 14)
—General enquiries
—Examination applications

Note: Membership number and Callsign should be on all correspondence. Please include a Break-In *label if available.*

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(entrance on west side of building)
88–90 Main Street
UPPER HUTT

Postal P.O. Box 40-252
Upper Hutt
Telephone (04) 282-170

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	Non-Members	$20.00
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PO Box 1733
CHRISTCHURCH

Official Broadcasts:
J. A. Meachen ZL2BHF
The monthly NZART Official Broadcast is made by:
ZL6A, WELLINGTON
3900kHz LSB

on the last Sunday of each month except December, when the broadcast is made on the Sunday before Christmas. The broadcast is also made on some VHF and UHF repeaters. A list of these can be found in *Break-In*.
The time of the broadcast is 2000 hours. A repeat broadcast is made at 2100 hours.
Members and Branches are welcome to submit material to ZL2BHF, C/- NZART Headquarters, PO Box 40-525, Upper Hutt, for inclusion in the broadcasts.

CONFERENCE OFFICIAL BROADCAST
The Official Conference Broadcast is held on the Sunday of Queen's Birthday Weekend at 2000 hours.

OC AREC:
D. J. Mackay ZL3RW

AREC Section Leaders Net

A monthly net of all AREC Section Leaders is held on the third Monday of each month at 1930 hours. Net is conducted by OC AREC, ZL3EX on 3900kHz Upper Sideband.

Monitoring Service Co-ordinator:
R. E. Knowles ZL1BAD/ZL6IW

The NZART Monitoring Service is part of the IARU Monitoring System, a world-wide system of Amateur monitoring stations, concerned with the activities of non-amateur stations in amateur bands.

The primary object of the Monitoring Service is to identify, report, and have removed, all non-amateur stations in the exclusive amateur bands.

Additionally, the Service monitors our bands for statistical purposes to support submissions on band usage.

Reports on "Intruders" should be sent to ZL1BAD, *Call Book* address.

Teletext

NZART Teletext Editors

Tony Dale ZL3LZ
30 Cuffs Road, Christchurch
Telephone (03) 887-913

Noel Barratt ZL1ATM
42b Scott Avenue
Mangere Bridge
Auckland 1701
Telephone (09) 666-176
Packet:
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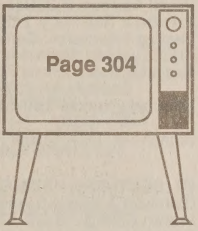

Educational Development Group

The EDG was set up by Council to look after the Education and Development of Amateur Radio in New Zealand.

The Group consists of John ZL4QS, Cathy ZL2ADK and Ron ZL3MQ. The Group meets regularly each fortnight on 3650kHz and we welcome any Amateur who has anything to offer the group.

The Group is in desperate need of a Co-ordinator who can look after the Group's activities.

MORSE TAPES

These are being compiled by Ron ZL3MQ on behalf of the Group. Please send money and tape to ZL3MQ *Call Book* address.

It is hoped the Q. & A. Book will be available to all early 1991.

The Radio Training Scheme now comes under the umbrella of the EDG Group.

Please refer to *Break-In* for up to date information.

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1929	R. J. Orbell	ZL1AX
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1977–83	A. G. Godfrey	ZL1HV
1983–85	D. J. Mackay	ZL3RW
1985–	T. D. Carrell	ZL3QL

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1964	H. F. Arnold	ZL3HA
1966	C. G. Liddell	ZL3ND
1982	G. C. Blackwell	ZL3NT
1983	A. G. Godfrey	ZL1HV
1985	J. F. C. Johnson	ZL2AMJ
1986	C. W. Parton	ZL3CP
1989	R. S. H. Morgan	ZL2GQ

NZART Branch Index

01 Ashburton
02 Auckland
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14 Hawera
58 Helensville
80 Hibiscus Coast
16 Horowhenua
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17 Huntly (inactive)
18 Hutt Valley
19 Inglewood
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69 Kapiti
67 Kawerau
20 Manawatu
59 Mangakino
21 Manukau
22 Marlborough
23 Marton
44 Matamata
24 Motueka
25 Napier
26 Nelson
27 New Plymouth
68 North Canterbury
52 Northern Hawkes Bay
73 Northern Wairoa
28 Northland
64 North Otago
29 North Shore
72 Opotiki
30 Otago
31 Pahiatua
65 Papakura
54 Patea
75 Queenstown
83 Raglan
32 Rahotu
62 Reefton-Buller
71 Rodney
33 Rotorua
34 South Canterbury
06 Southern Hawkes Bay
82 Southern Wairarapa
37 Southland
35 South Otago
36 South Westland
38 Taumarunui
60 Taupo
39 Tauranga
40 Te Awamutu
77 Te Aroha
53 Te Puke
41 Thames
42 Titahi Bay
57 Tokoroa
63 Upper Hutt
43 Waihi
45 Waimarino
81 Waikato VHF
46 Wairarapa
47 Waitara
55 Waitomo
48 Wanganui
03 Western Suburbs
50 Wellington
74 Wellington VHF
49 Westland

NZART BRANCH DIRECTORY

01 ASHBURTON BRANCH NZART
Clubroom Address: Vintage Car Club Rooms Tinwald.
Branch Callsign: ZL3AF. Trustees: ZL3UX, ZL3AFB
Branch Net: 144.6MHz on Mondays at 2030 hours.
Secretary: Gordon Mattingley ZL3TRM, phone (03) 308-8555
Postal Address: P.O. Box 361, Ashburton 8300.
President: Les Vincent ZL3UX, phone (03) 303-6306.
Meeting Information: Second Monday of the month, (except January)

02 AUCKLAND
Clubroom Address: 400 St John's Road, Meadowbank, Auckland, 1105.
Clubroom Telephone Number: (09) 5286-755.
Branch Callsign: ZL1AA. Trustees: ZL1KQ, ZL1AFU, ZL1BNV
Branch Net: 146.600MHz every Monday at 2015 hours.
Secretary: Martin Ellis ZL1ANJ, phone: (09) 528-5116.
Postal Address: P.O. Box 18-003, Glen Innes, Auckland 1130.
President: Don Webster ZL1CY, phone: (09) 555-554
Meeting Information: Third Tuesday of each month from January to November at 1930 hours. AGM is second Tuesday in December. AREC meets on the last Wednesday of each month having five Wednesdays.
Other Information: For Branch information contact either ZL1CY or ZL1ANJ, or Bob Murphy ZL1AFU, phone: (09) 534-5950. Clubrooms are usually open on Saturday mornings.

03 WESTERN SUBURBS
Clubroom Address: 3000 Great North Road, New Lynn
Branch Callsign: ZL1RK. Trustees: ZL1ST, ZL1AJI
Branch Net: 3570kHz on non meeting Mondays at 1930 hours.
146.525MHz on Thursdays at 1930 hours.
Secretary: Norm Smith ZL1ST, phone: (09) 818-5143
Postal Address: P.O. Box 15-122, New Lynn, Auckland 1232.
President: Avery Jefferies ZL1AJI, phone: (09) 818-6962
Meeting Information: First and third Mondays each month (except public holidays) at 1930 hours.
Radio Classes: Tuesdays at 1900 hours at Kelston Boys' High School. Instructor: Bryce De Luca ZL1AXT, phone: (09) 784-488.

04 CAMBRIDGE RADIO AND ELECTRONICS CLUB
Clubroom Address: Band Rotunda Leamington Domain.
Branch Callsign: ZL1ASW. Trustee: ZL1HP
Branch Net: 3560kHz on Sundays at 0900 hours.
146.575MHz on Sundays at 0900 hours.
Secretary: M. King ZL1CDI.
Postal Address: C/- P.O. Box 650, Cambridge 2351.
President: Des H. Hamblyn ZL1HP, phone: (071) 276-247.
Meeting Information: Last Tuesday of each month at 1930 hours.
Other Information: Construction every Tuesday at 1930 hours.

05 CHRISTCHURCH
Clubroom Address: 27 Galbraith Ave, Avonside, Christchurch 8006.
Clubroom Telephone Number: (03) 891-188.
Branch Callsign: ZL3AC. Trustee: ZL3RW.
Branch Net: Canterbury 725 on Sundays 2000 hours.
Secretary: Warren Strong, ZL3TX, phone: (03) 332-3493
Postal Address: P.O. Box 1733, Christchurch 8000.
President: Ron Parry, ZL3VX, phone: (03) 337-0365.
Meeting Information: General: First Wednesday of month.
AREC: second Wednesday of month. Both at 1945 hours.
Radio Classes: Contact Ron Godkin, ZL3TMO. 31 Cardrona Street, Christchurch 8006. Home phone (03) 880-043.
Other Information: "HAMLARKS" Editor, Roger Urlwin ZL3MG, (03) 351-8130.
Branch Net: M.C., Trevor Payne ZL3AHP (03) 237-361.

06 SOUTHERN HAWKES BAY.
Clubroom Address: Dannevirke CD Headquarters.
Branch Callsign: ZL2IB. Trustee: ZL2ABT.
Branch Net: 3865 kHz each Sunday at 0930 hours.
Secretary: R. Allison ZL2BRU, phone: (0653) 27-552
Postal Address: Te Uri Rd, RD3 Dannevirke 5491.
President: B. Tooke, ZL1UCZ, phone: (0650) 64-048.
Meeting Information: Third Monday of month at Woodville Bowling Club—Dannevirke CD Headquarters alternate months.
Radio Classes: See Branch 20 Directory listings.

07 NOT ALLOCATED

08 EASTERN SOUTHLAND
Branch Callsign: ZL4AL. Trustee: ZL4AO.
Secretary: John Norton ZL4IM, phone (020) 53-773.
Postal Address: C/- Private Bag, Pukerau, Southland 9750.
President: Neil Gilder ZL4GL, phone: (020) 84-192.
Meeting Information: Fourth Tuesday of each month at various venues.

09 EGMONT
In recess.

10 FRANKLIN AMATEUR RADIO CLUB INC.
Clubroom Address: Stadium Drive, Pukekohe.
Branch Callsign: ZL1SA. Trustee: ZL1US.
Branch Net: 3700kHz on Sundays at 0900 hours.
Secretary: Murray Griffin, ZL1UHT, phone: Home (085) 86-192, Work (085) 89-588.
Postal Address: 12 Valley Road, Pukekohe 1800.
President: R. Jeffares ZL1BTR, phone: (09) 597-688.
Meeting Information: Third Tuesday every month at 2000 hours.
Other Information: Contact Officers: M. Armstrong, 77 Queen Street, Pukekohe ZL1US Ph:(085) 86-567 and R. Holt ZL1BBZ 10 Collingwood Rd, Waiuku (085) 59-549 phone (home) (085) 58-089 ext 8244 or (09) 758-999 ext 8244 or (04) 738-118 ext 8244.

NZART Directory—*continued*

11 GISBORNE AMATEUR RADIO CLUB INC.
Clubroom Address: Civil Defence Rooms/also Kaiti Hall.
Clubroom Telephone Number: (079) 88-381.
Branch Callsign: ZL2AA. Trustee: ZL2ANQ.
Branch Net: 3666kHz on Sunday at 1030 hours.
Secretary: B. J. Davoren ZL2UT, phone: (079) 88-381.
Postal Address: P.O. Box 1017, Gisborne 3800.
President: Ian Mclachlan ZL2TNP, phone: (079) 88-653.
Meeting Information: Second Monday each month 1930 hours. Committee meeting fourth Monday each month at 1930 hours.

12 HAMILTON AMATEUR RADIO CLUB (INC).
Clubroom Address: 90 Seddon Road, Hamilton.
Branch Callsign: ZL1UX. Trustees ZL1AZZ.
Branch Net: 3575kHz on Mondays at 1930 hours.
Waikato 695 on Thursdays 2030 hours.
Secretary: Hugh Garnett-Frizelle ZL1TSM, phone (071) 67-647
Postal Address: P.O. Box 606, Hamilton 2000.
President: Alan Wallace ZL1AMW, Phone (071) 438-738.
Meeting Information: Third Wednesday monthly (except January) 1930 hours at Clubrooms.
Radio Classes: Contact Secretary or President initially. Morse classes Sundays 0930 hours at Clubrooms.

13 HASTINGS/HAVELOCK NORTH
Clubroom Address: Civil Defence Headquarters, Lyndon Road, Hastings.
Branch Callsign: ZL2BEI. Trustee: ZL3DK.
Branch Net: 3615kHz on Sundays at 0930 hours.
Secretary: Frank Giles ZL2AGI, phone: (070) 84-272.
Postal Address: 1006 Sussex Street, Hastings 4201.
President: Bill Lowes, ZL2UBG, phone: (070) 775-078.
Meeting Information: Fourth Wednesday of each month at Civil Defence Headquarters at 1930 hours.

14 HAWERA AMATEUR RADIO CLUB
Branch Callsign: ZL2AWW. Trustee: ZL2BOD.
Secretary: Peter Williams ZL2AID, phone: (062) 84-292
Postal Address: C/- P.O. Box 651, Hawera, South Taranaki 4800.
President: Jeanne Gilchrist ZL2BOD, phone: (062) 88-638.
Meeting Information: Irregular. Contact President or Secretary.

15 CENTRAL HAWKES BAY RADIO CLUB
Clubroom Address: "Pukeroa" Home for Disabled, Waipukurau.
Branch Callsign: ZL2AR. Trustee: ZL2ACP.
Branch Net: 3650kHz at 2000 NZ time.
Secretary: J. Simcox ZL2THK, phone (0728) 89-811.
Postal Address: P.O. Box 327 Waipukurau, Hawkes Bay 4176.
President: I.M. Smith ZL2AFY, phone: (0728) 58-258.
Meeting Information: Third Monday of each month at Clubrooms at 2000 hours.
Other Information: V. Brosnan ZL2ACP, phone: (0728) 77-080.

16 HOROWHENUA
Clubroom Address: Jack Allen House, 21 Durham Street, Levin.
Branch Callsign: ZL2DS. Trustee: ZL2ALB.
Branch Net: 146.500MHz on Sundays at 1000 hours.
3590kHz on Sundays at 0900 hours.
Secretary: Mrs G. M. Leslie ZL2UKG, phone: (069) 37-296.
Postal Address: 35 Robinson Street, Foxton 5551.
President: Mr N. Broadbent, phone: (069) 81-028.
Meeting Information: Fourth Wednesday each month except for December.

17 HUNTLY
In recess.

18 HUTT VALLEY
Clubroom Address: Birch Street Reserve, Lower Hutt.
Branch Callsign: ZL2HV. Trustees: ZL2ASO, ZL2ARW.
Branch Net: 3675kHz on Sundays at 0930 hours.
Secretary: Mrs Estelle Rothschild, 83 Pretoria Street, Lower Hutt.
Postal Address: P.O. Box 30519, Lower Hutt 6300.
President: Alan Aston ZL2AJI, phone: (040) 647-054.
Meeting Information: Meets in the Hutt Valley Tramping Clubrooms, situated on Birch Street Reserve, on the first Monday in the month except January—no meeting, and June when it meets second Monday in the month at 1930 hours.
Other Information: Contact Officer: Mike Ryan ZL2BSM, phone: (04) 670-282.

19 INGLEWOOD
In recess.
Contact Peter Cramer ZL2AIS, phone (067) 67-314.

20 MANAWATU
Clubroom Address: Totara Road, Palmerston North.
Branch Callsign: ZL2KO. Trustee: ZL2GU
Branch Net: 3570kHz on Sundays at 0930 hours.
147.125MHz on Thursdays at 2000 hours.
Secretary: Ian Thompson ZL2BPN, phone: (063) 74-545 after 1800 hours.
Postal Address: P.O. Box 1718, Palmerston North 5300.
President: Mike Newell ZL2UAJ, phone: (063) 69-324.
Meeting Information: First Wednesday of the month at 1930 hours and also on the fifth Wednesday in months when they occur.
Radio Classes: Contact Branch for information.

21 MANUKAU RADIO CLUB INC.
Clubroom Address: 8 Guide Place, Papatoetoe.
Branch Callsign: ZL1QB. Trustees: ZL1AID, ZL1IJ.
Branch Net: 3652kHz on Sundays at 0900 hours.
146.550MHz on Mondays at 2000 hours.
Secretary: Graham Coles ZL1BSU, phone: (09) 275-4365.
Postal Address: 8 Guide Place, Papatoetoe 1701.
President: Neil Kirton ZL1OV, phone: (09) 266-5888.
Meeting Information: Daytime 1015 hours Monday of same week as third Wednesday. Evening third Wednesday of each month at 1930 hours. Technical night fourth Wednesday 1930 hours.

22 MARLBOROUGH BRANCH N.Z.A.R.T
Clubroom Address: Civil Defence Headquarters, Wither Road Extension, Blenheim.
Clubroom Telephone: (057) 87-039.
Branch Callsign: ZL2KS. Trustees: ZL2BGQ, ZL2BGL.
Branch Net: 3566kHz on Sundays at 0900 hours.
Blenheim 695 on Mondays at 1930 hours.
Secretary: G. R. Simpson ZL2BK. Phone: (057) 89-390.
Postal Address: P.O. Box 432, Blenheim 7300.
President: R. S. Carter, phone: (057) 83-721.
Meeting Information: Second Thursday of each month at 1930 hours except January at C.D.H.Q.
Radio classes: Contact a committee member.

23 MARTON & DISTRICTS (no update received)
Clubroom Address: 359 Wellington Road, Marton.
Branch Callsign: ZL2AMS. Trustee: ZL2VS.
Branch Net: Taihape 6775 on Sundays at 2030 hours.
Secretary: Marie Stewart, phone (0652) 48-889.
Postal Address: P.O. Box 3, Bulls 5452.
President: H. R. (Dusty) Miller, phone: (0652) 6225.
Meeting Information: Fourth Wednesday of each month at 1930 hours.
Radio Classes: As required. For enquiries phone (0652) 48-889 or (063 293) 606.

24 MOTUEKA AMATEUR RADIO CLUB (INC.)
Clubroom Address: Members Homes.
Branch Callsign: ZL2GK. Trustee: ZL2KG.
Secretary: C. Bearsley, phone: (0524) 86-294.
Postal Address: P.O. Box 274, Motueka 7161.
President: Ken Sharland ZL2KG, phone: (0524) 76-754.
Meeting Information: First Monday of each month at 1930 hours except public holidays.

25 NAPIER AMATEUR RADIO CLUB INC. (no update received)
Clubroom Address: 123 Latham Street, Marewa, Napier.
Branch Callsign: ZL2ABJ. Trustee: ZL2IC.
Branch Net: Napier 725 on Tuesdays at 2000 hours.
Secretary: Gordon C. Fraser ZL2NF, phone (070) 442-367.
Postal Address: 14 Hinton Road, Taradale, Napier 4001.
President: Laurie J. Winton ZL2TIS, phone: (070) 438-519.
Meeting Information: Third Sunday of each month at 1930 hours in Clubrooms.
Other Information: Napier Amateur Radio Contest Group, ZL2GT (refer Stan White ZL2AHC). Affiliated group to Branches 13 and 25—Hawkes Bay VHF Group, P.O. Box 821, Napier, President Bill Johnson, phone (070) 444-856.

NZART Directory—*continued*

26 NELSON AMATEUR RADIO CLUB (INC.)
Branch Net: Nelson 720 on Wednesdays (except Club nights) at 2000 hours, 3890kHz on Sundays at 0900 hours.
Secretary: Andrew Mackie ZL2THG, phone (054) 61-429 (work) (054) 75-067 (home).
Postal Address: P.O. Box 414, Nelson 7000.
President: Max Finlay ZL2BTA, phone (054) 23-366.
Meeting Information: Fourth Wednesday of each month (except December). Venue as advised in Club Newsletter. At time of writing meetings are held at Ngawhatu Hospital.
Radio Classes: Contact Dolph Lyford ZL2UL, phone (054) 86-023 or Nelson Polytechnic (054) 69-175 for details.
Other Information: The Club provides a varied and interesting program. Visitors are welcome at all meetings. If you want copies of our Newsletter *CQ Nelson* or want to advertise in it, please contact Ron Terris ZL2UBI on (054) 77-988.

27 NEW PLYMOUTH AMATEUR RADIO
Clubroom Address: CDHQ Marsland Hill, New Plymouth.
Clubroom Telephone: (067) 513-787.
Branch Callsign: ZL2BDN. Trustee: ZL2AWR.
Branch Net: New Plymouth 720 on Wednesdays at 1930 hours.
Secretary: John Marsh ZL2TAS, phone: (067) 27-748.
Postal Address: P.O. Box 675, New Plymouth 4600.
President: Mel Fox ZL2AWR, phone: (067) 513-787.
Meeting Information: First Tuesday in month. Venue CDHQ.
Radio Classes: Contact Mel Fox (067) 513-787.
Other Information: Technical Group meeting first Tuesday in month. Venue CDHQ.

28 WHANGAREI BRANCH N.Z.A.R.T.
Clubroom Address: CD Headquarters, Whimp Avenue, Onerahi.
Branch Callsign: ZL1AM. Trustee: ZL1UOH.
Branch Net: 3740kHz on Sundays at 0900 hours.
Whangarei 720 on Mondays at 1930 hours.
Secretary: A. Walker ZL1BHC, phone: (089) 435-1413.
Postal Address: P.O. Box 10078, Te Mai, Whangarei 0130.
President: D. T. Ewen ZL1UOH, phone: (089) 432-0185.
Meeting Information: Second Wednesday of each month at 1930 hours. Most meetings at Clubrooms.

29. NORTH SHORE
Clubroom Address: J.F. Kennedy Memorial Park, 145 Beach Road, Castor Bay 1309.
Branch Callsign: ZL1AB. Trustees: ZL1ABS, ZL1ACX, ZL1AUW.
Branch Net: 3780kHz on Sundays 0900 hours.
Auckland 690 on Wednesdays 1930 (trial basis).
Secretary: Alan Wooller ZL1AUW, phone: (09) 444-2423.
Postal Address: P.O. Box 31-103, Milford, North Shore 1330.
President: Lynn Sayer ZL2PQ, phone (09) 444-8402.
Meeting Information: First Monday of each month at 1930 hours, except June when meeting is second Monday.
Radio Classes: Brian Oliver ZL1OL at Westlake Boys' High School, phone (09) 418-2253.
Other Information: *29-er* editor Paul Barratt ZL1AJY.

30 OTAGO
Clubroom Address: 109 Macandrew Road, Dunedin.
Clubroom Telephone Number: (024) 553-003.
Branch Callsign: ZL4AA. Trustee: ZL4MK.
Branch Net: Dunedin 690 on Sundays at 2100 hours.
Secretary: Keith R. Sellar ZL4LP, phone: (024) 775-437.
Postal Address: P.O. Box 5485, Dunedin 9000.
President: Vern Haig ZL4JN, phone: (024) 552-380.
Meeting Information: Each Wednesday at 1930 hours except late December and early January.
Other Information: Contact Officers Keith Shore ZL4AI and Brenda Shore ZL4OQ, phone (024) 662-618.

31 PAHIATUA
Clubroom Address: Main Road North, Pahiatua.
Branch Callsign: ZL2SP. Trustee: ZL2VJ.
Branch Net: 3570kHz on Thursday at 2000 hours.
Secretary: Mr H. J. Angelini, phone: (0650) 67-704
Postal Address: RD2, Pahiatua 5471.
President: R.W. Brown ZL2ACK, phone: (0650) 8126.
Meeting Information: Third Thursday each month Clubrooms at 2000 hours.

32 RAHOTU COASTAL
Clubroom Address: Domett Street, Opunake.
Branch Callsign: ZL2ANN. Trustee: ZL2OF.
Branch Net: Opunake 540 on Mondays at 1930 hours.
Secretary: J. N. Jago ZL2TNC, phone: (0624) 8257.
Postal Address: 63 Reimenschneider Street, Manaia 4851.
President: P. McNeil ZL2BQW, phone: (0661) 8028.
Meeting Information: Second Thursday at 1930 hours. Clubrooms Domett Street, Opunake.
Radio classes: As required.

33 ROTORUA AMATEUR RADIO CLUB INC.
Clubroom Address: Wohlmann House, 3 Hinemoa Street, Rotorua.
Branch Net: Rotorua 735 on Fridays at 2030 hours.
Secretary: Ted Bretherton ZL1AVC, phone: (073) 459-687.
Postal Address: Rotorua Amateur Radio Club, P.O. Box 1766, Rotorua 3200.
President: B. N. Spring-Rice ZL2DQ, phone (073) 24-675.
Meeting Information: Held at Wohlmann House third Tuesday of month at 1930 hours. Informal meeting first Tuesday of month 1930 hours.

34 SOUTH CANTERBURY
Clubroom Address: Civil Defence HQ, Bank Street, Timaru.
Branch Callsign: ZL3UR. Trustee: ZL3CU
Secretary: Brian Hall, phone(056) 57-081
Postal Address: 27 John Street, Temuka 8752.
President: Ken Davy ZL3HG (056) 43-822.
Meeting Information: Last Monday—even numbered months at 1930 hours.

35 BALCLUTHA
Clubroom Address: Main South Road, Balclutha.
Branch Callsign: ZL4JF. Trustee: ZL4HD.
Branch Net: 3565kHz on Mondays at 2000 hours.
Kuriwao 675 on Mondays at 1930 hours.
Secretary: Ron Blair ZL4TLL, phone: (03) 415-7673.
Postal Address: Taumata RD Clinton, South Otago 9251.
President Allan Taylor ZL4TJZ, Phone (03) 418-0316.
Meeting Information: First Tuesday of month at Clubrooms, Main South Road, Balclutha at 2000 hours.
Other Information: No meeting in January.

36 HOKITIKA
Secretary: Val Searle ZL3GW, phone: (0288) 56-741.
Postal Address: 7 Whitcombe Terrace, Hokitika 7900.
President: G. R. Bowman ZL3BH, phone (0288) 57-143.
Meeting Information: Irregular, please contact Secretary.

37 SOUTHLAND
Clubroom Address: 249 Ettrick Street, Invercargill.
Clubroom Telephone No: (021) 88-686.
Branch Callsign: ZL4GQ. Trustees: ZL4OX, ZL4TFJ.
Secretary: Bill Obers ZL3TPE, phone: (021) 59-765.
Postal Address: P.O Box 1260, Invercargill 9500.
President: Keith Reid ZL4NZ, phone: (021) 63-377.
Meeting Information: Third Tuesday—Branch at 2000 hours. First Tuesday—AREC at 1930 hours, except January.
Radio Classes: None this year. Enquiries to Neville Checketts ZL4OX, 21 Highfield Terrace, Invercargill.
Other Information: Contact Officer—Malcolm Davidson ZL4NO, 7 Jack Street, Invercargill, phone: (021) 68-564 (home).

38 TAUMARUNUI
Clubroom Address: Turaki Street (next to Police Station).
Clubroom Telephone Number: (0812) 8788.
Branch Net: Taumarunui 715 when necessary.
Secretary: Debbie Wells, phone: (0812) 57-139.
Postal Address: C/- L. H. Palmer, 229 Taupo Road, Taumarunui 2600.
President: Lew Palmer ZL1TIG, phone: (0812) 8113.
Meeting Information: Second Monday of each month.

NZART Directory—*continued*

39 TAURANGA AMATEUR RADIO CLUB
Clubroom Address: Civil Defence HQ, Barkes Corner, Tauranga.
Clubroom Telephone Number: (075) 85-019.
Branch Callsign: ZL1TP. Trustees: ZL1BOM, ZL1AKW, ZL1QI.
Branch Net: 3600kHz on Sundays at 0900 hours
Tauranga 680 on Wednesdays at 2030 hours.
Secretary: Owen Booth ZL1USD, phone: (075) 64-104.
Postal Address: P.O. Box 6003, Tauranga 3000.
President: Paul Gillett ZL1QI, phone: (075) 410-504.
Meeting Information: First Thursday of month at 1930 hours at Clubrooms.
Radio Classes: Monday nights at clubrooms 1900-2100 hours, March to September.
Other Information: PBBS = ZM1UX.

40 TE AWAMUTU
Clubroom Address: C/- C. D. Rooms, Bank Street, Te Awamutu.
Branch Callsign: ZL1CB. Trustee: ZL1AOM.
Branch Net: 3865kHz on Thursdays at 2030
3555kHz on Tuesdays at 2030 hours.
Secretary: Murray Dunwoody ZL1LZ, Phone: (07871) 6491.
Postal Address: P.O. Box 583, Te Awamutu 2400.
President: Peter Shaw ZL1UFS, phone: (07129) 6518.
Meeting Information: Every third Wednesday, C. D. Rooms, Banks Street, Te Awamutu, 1945 NZST.
Radio Classes: Technical Course Correspondence.

41 THAMES
Branch Callsign: ZL1DF. Trustee: ZL1APF.
Branch Net: 3850kHz on Sundays at 0900 hours.
Secretary: Lea Bateman ZL1APF, phone: (0843) 87-054.
Postal Address: 109 Lambert Street, Thames 2801.
President: Peter Williams ZL1BEB, phone: (0843) 77-281.
Meeting Information: Irregular. Contact President or Secretary.

42 TITAHI BAY
Clubroom Address: Tireti Hall, Tireti Road, Titahi Bay.
Branch Callsign: ZL2AFV. Trustee: ZL2AGY.
Branch Net: 3710kHz on Sundays at 1100 hours.
Secretary: K. W. Rumens, phone: (04) 328-437.
Postal Address: 19 Duval Grove, Tawa, Wellington 6203.
President: L. Jury ZL4SS, phone: (04) 368-516.
Meeting Information: First Tuesday each month (except January) at 1930 hours.
Radio Classes: As required.

43 WAIHI & DISTRICTS ARC
Clubroom Address: 5 Martha Street, Waihi 2991.
Clubroom Telephone Number: (07863) 7141.
Branch Callsign: ZL1BAE. Trustee: ZL1BAS.
Branch Net: 146.575MHz on Sundays at 2100 hours NZST.
Secretary: Anne Anderson ZL1TAF, phone: (07) 863-7546.
Postal Address: 5 Martha Street, Waihi 2991 or Secretary's *Call Book* address.
President: Owen Morgan ZL1BAS, phone: (07863) 8540.
Meeting Information: First Thursday of each month, except January - Please note change of day.
Radio classes: As required—contact Secretary. Construction Group—Sundays 1300-1500 hours at clubrooms.
Other Information: Junior Electronics Club—contact Secretary for information. Thursday lunchtime social group. Visitors always welcome.

44 MATAMATA RADIO CLUB
Branch Callsign: ZL1RF. Trustee: ZL1AGA.
Branch Net: 3560kHz on Sundays at 0900 hours.
Secretary: Ian Perkins ZL1BFH, phone: (0818) 6839.
Postal Address: 74 Tawari Street, Matamata 2271.
President: John Rasmussen ZL1AGA, phone: (0818) 8269.
Meeting Information: Second Wednesday each month at 1930 hours in staffroom of Matamata Borough Council.

45 WAIMARINO
Branch Callsign: ZL2MG. Trustee: ZL2AVL
Secretary: G. W. Luscombe ZL2AVL, phone: (0658) 56-707.
Postal Address: 5 Main Road, Waiouru 5164.
President: T. L. Garmonsway ZL2AMT, phone: (0658) 81-448.
Meeting Information: Irregular—please contact Secretary.

46 WAIRARAPA AMATEUR RADIO CLUB
Clubroom Address: Hood Aerodrome, Masterton.
Clubroom Telephone Number: (059) 83-153.
Branch Callsign: ZL2OA. Trustee: ZL2IC.
Branch Net: Rewa 735 on Mondays at 2000 hours.
Secretary: David Bray ZL2UCW, phone: (059) 25-704.
Postal Address: P.O. Box 860, Masterton 5900.
President: John Hudson ZL2BNT, phone: (059) 87-484.
Meeting Information: Second Monday of each month (except January) at 1930 hours.
Radio Classes: As required.

47 WAITARA AMATEUR RADIO
Clubroom Address: Waitara District Council, Queen Street, Waitara.
Branch Callsign: ZL2TO. Trustee: ZL2BPW.
Branch Net: 3666kHz on Tuesdays at 2000 hours.
Secretary: Sid McKain ZL2BIF, phone: (067) 48-460.
Postal Address: 1354 Devon Road, 42 RD, Waitara 4656.
president: Larry Smart ZL3UD, phone: (067) 47-583.
Meeting Information: First Sunday each month at 1930 hours in District Council Chambers.

48 WANGANUI AMATEUR RADIO SOCIETY (INC).
Clubroom Address: Deerstalkers Hall, 100 Peat Street, Wanganui.
Branch Callsign: ZL2JA. Trustees: ZL2AUS, ZL2BGE.
Secretary: M. D. Newman ZL1BNB, phone: (064) 46-830.
Postal Address: 1 Caversham Road, Mosston, Wanganui 5001.
President: G. R. Hawtree ZL2AHR, phone: (064) 47-501.
Meeting Information: First non-public holiday Monday each month February to December at 1930 hours.
Radio Classes: Contact Mike Newman ZL1BNB for information.

49 WESTLAND
Secretary: Kevin O'Sullivan ZL3ABY, phone: (027) 7598.
Postal Address: 53 Marlborough Street, Greymouth 7801.
President: Craig Terris ZL2UAY, phone: (027) 4087.
Meeting Information: First Wednesday in the month at 1930 hours (except January). Contact Secretary or President for venue.
Radio Classes: Contact Secretary for information.
Other Information: Westland Repeater "695" as contact for club members. Contact Officer: Zelda Garlick ZL3AAB, 23 Lydia Street, Greymouth, phone: (027) 7332.

50 WELLINGTON
Clubroom Address: MED cafeteria, Webb Street, Wellington.
Branch Callsign: ZL2WB. Trustee: ZL2AQC.
Branch Net: 3570kHz on Sundays at 1100 hours.
Secretary: Peter Moore, ZL2ULE, phone: (04) 845-246.
Postal Address: P.O. Box 6464, Te Aro, Wellington 6035.
Chairman: Bob Stewart ZL2AMI, phone: (04) 758-448.
Meeting Information: Third Tuesday of month, except December at 1930 hours.
Other Information: AREC Secretary Dan Doyle ZL2AQC, phone: (04) 793-407. Social group meets fourth Tuesday at 1400 hours, Lutheran Hall, King Street, Newtown. Contact Val Parminter ZL2AJ, phone: (04) 793-407.

51 EASTERN BAY OF PLENTY
Clubroom Address: Waiewe Street, Whakatane.
Branch Callsign: ZL1AIU. Trustee: ZL1AOF.
Branch Net: Edgecumbe 700 on Mondays 2000 hours
3722/3622kHz on Mondays at 1930/1935 hours.
Secretary: Bryan Burgess ZL1CDN, phone:(home) (076) 24-721 (work) (076) 71-771.
Postal Address: P.O. Box 2165, Whakatane 3400.
President: George Brabant ZL1CDV, phone: (076) 84-220.
Meeting Information: General meeting second Wednesday of the month at 1930 hours.
Radio Classes: Every Tuesday at 1900 hours at Clubroom.

52 NORTHERN HAWKES BAY
No information received.

NZART Directory—*continued*

53 TE PUKE
Clubroom Address: State Highway 2, next to Te Puke Holiday Park.
Branch Net: 3600kHz on Sundays at 0900 hours.
Tauranga 680 on Wednesdays at 2030 hours.
Secretary: E. E. A. Brown, ZL1IB, phone: (075) 738-722.
Postal Address: 20 Gilmore Street, Te Puke, Bay of Plenty 3071.
President: F. I. Gibbs ZL1ARZ, phone: (075) 739-643.
Meeting Information: Second Tuesday each month at 1930 hours in Clubrooms. Each Saturday at 1300 hours in Clubrooms.
Radio Classes: As required.

54 PATEA
Branch Callsign: ZL2QF. Trustees: ZL2AFE, ZL2BJI, ZL2AHI.
Branch Net: Egmont 705 on Sundays at 0830 hours.
Secretary: Dave Robinson ZL2BJI, phone: (062) 87-486.
Postal Address: P.O. Box 156, Hawera 4800.
President: John Clarkson ZL1UJX, phone: (0623) 8576.
Meeting Information: Third Monday each month at Hawera Primary School.

55 WAITOMO RADIO CLUB
Clubroom Address: Thompson Avenue, Otorohanga.
Branch Callsign: ZL1IZ. Trustees: ZL1BZ, ZL1ADG
Branch Net: 3850kHz on Mondays at 2000 hours.
Waitomo 7375 on Sundays at 0900 hours.
Secretary: Ian Murrell ZL4SU, phone: (0813) 86-399.
Postal Address: 65 King Street, Te Kuiti 2500.
President: Mick Gannon ZL1HJ, phone: (0813) 87-140.
Meeting Information: First Tuesday of each month at 1930 hours.

56 CHRISTCHURCH WEST AMATEUR RADIO CLUB
Clubroom Address: Auburn Avenue, Upper Riccarton, Christchurch.
Branch Callsign: ZL3VV. Trustees: ZL3BJ, ZL3ACS.
Secretary: Roy C. Timms ZL3AIB, phone: (03) 351-7316.
Postal Address: C/- P.O. Box 31-095, Ilam, Christchurch 8030.
President: R. D. E. Berry ZL3TOB, phone (03) 355-8240.
Meeting Information: Branch meeting fourth Tuesday evening each month. Morse classes every Tuesday evening at 1930 hours (1900 hours Branch Meeting night). Free 'n Easy meeting middle Wednesday each month 1330-1600 hours.

57 TOKOROA AMATEUR RADIO CLUB INC.
Clubroom Address: Ireland Reserve, Baird Road, Tokoroa.
Branch Callsign: ZL1AQR. Trustee: ZL1BEG.
Branch Net: Tokoroa 7025 on Mondays at 1900 hours.
Secretary: Ted Oxner ZL1TLV, phone: (0814) 65-955.
Postal Address: Ireland Reserve, Baird Road, Tokoroa 2392.
President: Des Zien ZL1TWH, phone: (0814) 66-292.
Meeting Information: Third Monday of month (except January) at 1930 hours in Clubrooms.
Radio Classes: As required. Training Officer: G. McFarlane ZL1BEG.

60 TAUPO
Clubroom Address: Taupo County Depot, Spa Road, Taupo.
Clubroom Telephone: (074) 84-602.
Branch Net: Taupo 675 on Mondays at 1930 hours.
Secretary: Peter Savage ZL1URD, phone: (074) 86-951.
Postal Address: 155 Rifle Range Road, Taupo 3300.
President: Graham Messenger ZL1BVO, phone: (074) 84-162.
Meeting Information: First Thursday each month at 1930 hours at Clubrooms.

61 CENTRAL OTAGO
Clubroom Address: Alexandra Fire Station, Centennial Ave.
Branch Net: 3660kHz on Tuesdays at 2000 hours.
Secretary: David Mulder ZL4DK, phone: (03) 448-9346.
Postal Address: 60 Ashworth Street, Alexandra 9181.
President: Wattie Beveridge ZL4ST, phone: (03) 448-6880.
Meeting Information: Fourth Thursday each month (except December) at 2000 hours.

62 REEFTON-BULLER
Branch Net: 3880kHz on Sundays at 2000 hours.
Secretary: Carl Hansen, phone: (0289) 28-235.
Postal Address: 6 Greenfield Street, Hector, Buller 7650.
President: George Lobb ZL3PB, phone: (0289) 7461.
Meeting Information: First Monday each month except January, second Monday if first is a public holiday. 61 Wakefield Street, Westport at 1930 hours.
Radio Classes: Contact Secretary or President.

63 UPPER HUTT
Clubroom Address: Rear of Upper Hutt Council Chambers, Fergusson Drive, Upper Hutt.
Clubroom Telephone: (04) 288-769 Ext 849.
A.H. (04) 288-769.
Branch Callsign: ZL2VH. Trustees: ZL2ACT, ZL2TJT.
Branch Net: Climie 730 and Climie 860—continuous.
Secretary: Joe Reed, phone: (04) 287-705.
Postal Address: 11 Wood Street, Upper Hutt 6401.
President: Chris Hannigan ZL4OY, phone (04) 266-060.
Meeting Information: Second Sunday of each month except January.
Radio Classes: Contact Club Secretary.
Other Information: Contact Branch or AREC. R. N. Copeland ZL2AKV, phone: (04) 282-170 (work).

64 NORTH OTAGO
Clubroom Address: Car Club Rooms, Stoke Street.
Branch Callsign: ZL4OU. Trustee: ZL4SN.
Branch Net: 3850kHz, Oamaru 670.
Secretary: D. Hasler ZL4IX, phone: (0297) 72-454.
Postal Address: 10 Meon Street,Oamaru 8901.
President: N. McLeod ZL4SN, phone: (0297) 47-253.
Meeting Information: Second Monday each month (except January) at 1930 hours at Clubrooms.
Radio Classes: Contact D. Bokser ZL4TFF.
Other Information: Contact Officer: E. Armstrong ZL4TR, phone (0297) 48-903.

65 PAPAKURA RADIO CLUB INC.
Clubroom Address: 2a Wood Street, Papakura.
Clubroom Telephone Number: (09) 295-8871.
Branch Callsign: ZL1VK. Trustee: ZL1AKY.
Branch Net: 3755kHz on Sundays at 0900 hours.
146.475MHz on Sundays at 0930 hours.
Secretary: Eileen Bain ZL1BRX, phone: (085) 87684.
Postal Address: P.O. Box 397, Papakura 1703.
President: Fred Johnson ZL1BUP, phone: (09) 298-6789.
Meeting Information: Second Wednesday of each month at 1930 hours.
AREC Section meets at Clubrooms on fifth Wednesday.
Radio Classes: Contact Jeff Reid ZL1AKY, phone (09) 294-8199.
Other Information: Newsletter Editors: Dave Johnstone ZL1AMN and Ron Moroney ZL1BTI.
CW Practice Sessions Fred Bain ZL1SP, 3755kHz at 1900 hours Monday to Friday.
Awards Custodian: Carol Johnstone ZL1AJL.
Hall Bookings: Clare Chapman ZL1AXC.

66. AUCKLAND VHF GROUP INC (no update received)
Clubroom Address: Hazel Avenue, Mount Roskill, Auckland.
Branch Callsign: ZL1BQ. Trustee: ZL1MO.
Branch Net: Auckland 6625 on Sundays at 2015 hours.
Secretary: Ken Boyce ZL1TVQ, phone: (09) 694-920.
Postal Address: P.O. Box 10-138, Balmoral, Auckland 1030.
President: Don Beale ZL1BJB, phone: (09) 294-8503.
Meeting Information: General meeting every third Monday at E Block, Auckland College of Education, Epsom, Auckland for 1989.

67 KAWERAU AMATEUR RADIO & HOBBIES CLUB
Clubroom Address: A.T.C. Hall Onslow Street, Kawerau.
Clubroom Telephone: (076) 38-722.
Branch Callsign: ZL1KW. Trustee: ZL1BGE.
Branch Net: 3615kHz on Wednesdays at 1930 hours except third Wednesday of the month.
Secretary: Jim Fitzpatrick ZL1CAM, phone: (07320) 846.
Postal Address: P.O. Box 209, Kawerau 3452.
President: Christine Armstrong ZL1BQW, phone: (076) 37-278.
Meeting Information: Third Wednesday of every month at 1930 hours, in Clubrooms.

68 NORTH CANTERBURY AMATEUR RADIO CLUB
Clubroom Address: Waimakariri District Council Car Park, Percival Street, Rangiora.
Branch Callsign: ZL3RR. Trustee: ZL3OC.
Branch Net: 146.600MHz on Sundays at 1900 hours.
3605kHz on Mondays preceeding meeting at 2030 hours.
Secretary: Lorna Allan ZL3AAZ, phone: (0502) 35-352.
Postal Address: 4 Highfield Lane, Rangiora 8254.
President: Geoff Gillman ZL3QR, phone: (0502) 27-883.
Meeting Information: Second Thursday of the month (except January) at 1930 hours.
Radio Classes: Every Wednesday, 1900-2100 hours, at the Clubrooms. Tutor Ron McMaster ZL3MQ, phone: (0327) 8278.

NZART Directory—*continued*

69 KAPITI BRANCH
Clubroom Address: 97 Rosetta Road, Raumati South.
Clubroom Telephone: (058) 86-664.
Branch Callsign: ZL2KB. Trustee: ZL2JG.
Branch Net: Kapiti 685 on Sundays at 1930 hours.
Secretary: D. E. Young, phone: (058) 86-664.
Postal Address: P.O. Box 166, Paraparaumu 6152.
President: Reg Danrell, ZL2DR, phone: (058) 34-544.
Meeting Information: First Wednesday every month (except January) in the Clubrooms, at 2000 hours.
Radio Classes: Contact Dennis Young ZL2BFI, phone: (058) 86-664.
Other Information: Contact Officer ZL2AGX, phone (058) 86-664 or call on Kapiti 685 or 885 repeaters.

70 FEILDING RADIO CLUB
Branch Callsign: ZL2AMR. Trustee: ZL2QR.
Secretary: Alan J. Abel ZL2QR, phone: (063) 36-538.
Postal Address: 20 Ranfurly Road, Feilding 5600.
President: G. J. Hitchman, ZL2BNA, phone: (063) 35-847.
Meeting Information: Second Monday, as required, at member's homes (contact Secretary).

71 RODNEY
Clubroom Address: Rodney District Council Office, Baxter Street, Warkworth or Civil Defence Building, School Road, Wellsford.
Secretary: A. J. Dale ZL1ABL, phone: (08463) 8938.
Postal Address: 61 Rodney Street, Wellsford 1493.
President: I. A. Yule, phone: (09) 425-5948.
Meeting Information: Second Wednesday of the month (except January) at 2000 hours. Varies between Warkworth and Wellsford check with Contact Officer.
Contact Officers: A. J. Dale, 61 Rodney Street, Wellsford.
W. Tester, 48 Pulham Road, Warkworth.

72 OPOTIKI RADIO CLUB
Clubroom Address: Opotiki Hospital, Hukutaia Road.
Clubroom Telephone Number: (076) 56-168.
Branch Callsign: ZL1BY. Trustee: ZL1BDG.
Secretary: L. H. George ZL1BGH
Postal Address: C/- Box 315 Opotiki 3472
President: F. L. Mogford ZL1BDG, phone: (076) 56-932.
Meeting Information: First Sunday each month at 0930 hours.

73 NORTHERN WAIROA ELECTRONICS CLUB
(no information available)

74 WELLINGTON VHF GROUP INC.
Clubroom Address: MED Cafeteria, Webb Street, Wellington.
Clubroom Telephone Number: (04) 735-449.
Branch Callsign: ZL2WA. Trustee: ZL2ARW.
Secretary: Wayne Knowles ZL2BKC, phone: (04) 780-893.
Postal Address: P.O. Box 12-259., Wellington North 6038.
President: John Yaldwyn ZL2TRV, phone: (04) 783-222.
Meeting Information: Last Thursday of each month (except December) at 1930 hours.
Other Information: ATV Group meeting 3 weeks before main meeting.

75 QUEENSTOWN
Branch Callsign: ZL4NQ. Trustee: ZL4KW.
Secretary: Peter Brentwood ZL4GU, phone: (03) 442-9549.
Postal Address: P.O. Box 289, Queenstown 9692.
President: Murray McCutcheon ZL4OA, phone: (03) 442- 8692.
Meeting Information: Irregular.
Radio Classes: As required. Contact Secretary for information.

76 KAIKOURA RADIO CLUB
Clubroom Address: 222 Esplanade, Kaikoura.
Branch Net: Kaikoura 690 on Saturdays at 1930 hours.
Secretary: Revd Wilf Bool, phone: (03) 319-5936.
Postal Address: 145 South Bay Parade, Kaikoura 7351.
President: Bill Jackson ZL3PZ, phone: (03) 319-5302.
Meeting Information: Second Monday at 1930 hours.

77 TE AROHA & DISTRICTS RADIO CLUB
Clubroom Address: Rewi Street, Te Aroha.
Clubroom Telephone Number: (07) 884-8026.
Branch Callsign: ZL1BSM. Trustee: ZL1BWK.
Secretary: Grant Horn ZL1UNX, phone: (07) 884-5720.
Postal Address: P.O. Box 24, Te Aroha 2971.
President: Jack Sanne ZL1VH, phone: (071) 568-180.
Meeting Information: Third Tuesday of February, April, July, October at 2000 hours.

78. FAR NORTH DISTRICTS AMATEUR RADIO CLUB (INC).
Branch Callsign: ZL1BG. Trustees: ZL1ALU, ZL1UEW.
Branch Net: 3615kHz on Sundays at 2000 hours.
Far North 710 on Thursdays at 2000 hours.
Secretary: Russell Shackleton ZL1BQK, phone: (0889) 80-057.
Postal Address: P.O. Box 81 Kaitaia 0500.
President: Clynton Allen ZL1UEW, phone: (0889) 75-706.
Meeting Information: Second Wednesday of each odd month in member's homes.
Radio Classes: Contact Brian Tarlton, phone (0889) 81-447.

79. HOWICK & DISTRICTS RADIO CLUB
Clubroom Address: R.S.A. Building, Wellington Street, Howick.
Clubroom Telephone: (09) 534-9702.
Branch Callsign: ZL1TB. Trustee: ZL1AOC.
Branch Net: 3800kHz on Sundays at 0900 hours.
146.575MHz on Wednesdays at 2000 hours.
Secretary: Bert Toomey ZL1AQX, phone (09) 534-5161.
Post Address: P.O. Box 82-127, Highland Park 1730.
President: Vern Morris ZL1TDG, phone: (09) 534-2892.
Meeting Information: Club meets first Wednesday in every month except January, at RSA Hall, Wellington Street, Howick.

80. HIBISCUS COAST AMATEUR RADIO CLUB INC.
Clubroom Address: 479/1 Whangaparaoa Road, Whangaparaoa 1463.
Clubroom Telephone Number: (0942) 45-195.
Branch Callsign: ZL1FU. Trustees: ZL1AG, ZL1ACY.
Branch Net: 3725kHz on Sundays at 0900 hours.
145.550MHz on Sundays at 0945.
Secretary: W. K. Faulkner ZL1FQ, phone: (0942) 63-966.
Postal Address: 479/1 Whangaparaoa Road, Whangaparaoa 1463.
President: David Wadham ZL1TIS, phone: (09) 892-694, (0942) 43-002.
Meeting Information: Fourth Monday each month (except December second Monday) at 1930 hours at Clubrooms.

81. WAIKATO VHF GROUP (INC)
Branch Callsign: ZL1IS. Trustees: ZL1HP.
Branch Net: Waikato 695 on Sundays at 2015 hours.
Secretary: Gavin Petrie ZL1UAB, phone: (071) 564-025.
Postal Address: P.O. Box 606, Hamilton 2000.
President: Des Hamblyn ZL1HP, phone: (071) 276-247.
Meeting Information: Committee meets January, April, July and October. General meetings are held in February, May, August and November. Listen to Net for details.

82. SOUTHERN WAIRARAPA A.R.C.
Clubroom Address: St John Building, Lyon Street, Featherston.
Clubroom Telephone Number: (0553) 89-431.
Branch Callsign: ZL2BPP. Trustee: ZL2QW.
Branch Net: Southern Wairarapa 715.
Secretary: Mrs P. Carr ZL2QW, phone: (0553) 89-576.
Postal Address: P.O. Box 163, Featherston 5952.
President: R. A. Pearce ZL2GJ, phone: (0553) 28-758.
Meeting Information: First Sunday each month (except January) at 1930 hours.
Radio Classes: As required.

83. RAGLAN AMATEUR RADIO CLUB.
Clubroom Address: 25 Bay View Road, Raglan.
Clubroom Telephone Number: (071) 258-018.
Branch Callsign: ZL1CCT. Trustees: ZL1BRU, ZL1BFM.
Branch Net: 146.525MHz on Tuesdays at 1930 hours.
3625kHz on Saturdays at 0830 hours.
Secretary: Fred Gilbert, ZL1BRU, phone: (071) 258-018.
Postal Address: 25 Bay View Road, Raglan 2051.
President: Trevor Andrews, ZL1BFM, phone: (071) 258-815.
Meeting Information: Quarterly by arrangement.

**1990 is
New Zealand's
year—make it
NZART's as well**

The Amateur's Code

The radio amateur is:

CONSIDERATE. . . . . never knowingly uses the air in a manner such as to lessen the enjoyment of others.

LOYAL. . . . . offers loyalty, encouragement and support to fellow amateurs, local club and National Society through which amateur radio is represented to Government, the International Amateur Radio Union and the International Telecommunication Union.

PROGRESSIVE. . . . . with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY. . . . . slow and patient sending when requested; friendly advice and counsel to the beginner; kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED. . . . . . . .radio is a hobby never interfering with duties owned to home, job, school or community.

PATRIOTIC. . . . . . . .station and skill always ready for service to community and country.

CHANGE OF ADDRESS

To ensure your details are correct for *Call Book* 1991 please complete this form.

Name ____________________ Callsign ____________ Membership Number ____________

Old Address ____________________ New station address ____________________

____________________ ____________________

____________________ ____________________

Postcode ____________

Please tick which address you wish to appear in *Call Book*

Station ☐ Postal ☐ Both ☐

Break-In Postal address ____________________

(if different from above) ____________________

____

Postcode ____________

Remember: If you change your address you should advise your nearest office of the Radio Frequency Service and the General Secretary of NZART.

POST THIS FORM TO NZART—P.O. BOX 40-525, UPPER HUTT

New Zealand Amateur Radio Stations

ZL1 Callsigns

ZL1AA	Auckland Branch NZART (Inc.), see Branch Directory
ZL1AB	North Shore Branch NZART (Inc), see Branch Directory
ZL1AC	Spackman, L. S., 124c Taylor Street, Blockhouse Bay, Auckland.1207
ZL1AE	Duffin, R. W., 4 Cotterill Road, Leigh.1490
ZL1AF	Ogier, I. W., 32 Rangitane Street, Palmerston North.5301
ZL1AG	Gilbert, L. H., 3b Lillian Place, Orewa.1461
ZL1AH	Wightman, J. D., 359 Maungatapu Road, Tauranga.3001
ZL1AI	Badman, R. G., 14 Fenwick Crescent, Hillcrest, Hamilton.2001
ZL1AJ	Culloty, H. F. J., 5 May Street, Hillcrest, Hamilton.2001
ZL1AK	Mitchell, B. A., P.O. Box 7, 12 Ward Street, Waharoa.2272
ZL1AL	Benton, T. J., 90 Koraha Street, Remuera, Auckland.1105
ZL1AM	Northland Branch NZART (Inc.), see Branch Directory
ZL1AN	Bold, G. E. J., 15 Kauri Road, Birkenhead, Auckland.1310
ZL1AQ	Rouse, G. C., 1 Mears Road, Hamilton.2001
ZL1AR	Walsh, J. S., Maungatapu Road, Glenfalls, R.D. 1, Morrinsville.2251
ZL1AS	McRae, I. H., Flat 1, 19 Church Street, Northcote, Auckland.1309
ZL1AT	Pawson, E., 6 County Road, Torbay, Auckland.1310
ZL1AU	Scouse, P. N., 10 Eastview Road, Glen Innes, Auckland.1106
ZL1AV	Tremayne, D. T., Spencer Road, Lake Tarawera, Rotorua.3201
ZL1AW	Bailey, C. A., 261 Papamoa Beach Road, R.D. 7, Te Puke.3071
ZL1AX	Crooks, G. E., 2/21 Elizabeth Street, Orewa, Auckland.1461
ZL1AZ	Brown, M. A., 38 Cyclarama Crescent, Massey, Auckland.1208
ZL1BB	Bunting, A. B., 3a Hillary Heights Avenue, Henderson, Auckland.1208
ZL1BD	Wilson, A., Waingaro Road, R.D. 1, Ngaruawahia.2171
ZL1BF	Hall, R. J., 20b Lowtherhurst Road, Massey, Auckland.1208
ZL1BG	Far North Districts Amateur Radio Club, see Branch Directory
ZL1BH	Creasy, S. C., 7 Crowther Terrace, Taupo.3300
ZL1BI	Freeman, S. J., 236a Scenic Drive, Titirangi, Auckland.1207
ZL1BJ	Llewellyn, J. D., 7 Moreland Road, Mt. Albert, Auckland.1003
ZL1BK	Long, R. J., 175 Green Lane Road, Green Lane, Auckland.1105
ZL1BL	Chew, J. B., Wight Street, Huntly.2191
ZL1BN	Kirkwood, B. J., 147 John Street, Ponsonby, Auckland.1002
ZL1BO	Laing-Smith, I. E., 69 Stamford Park Road, Waikowhai, Auckland.1004
ZL1BP	Harris, W. F. H., 80 Roberts Road, Te Atatu South, Auckland.1208
ZL1BQ	Auckland VHF Group (Inc), see Branch Directory
ZL1BR	Hanson, K. O., 10 Shelly Beach Road, Surfdale, Waiheke Island.1470
ZL1BS	Scott, D. T. S., 237 Metcalfe Road, Ranui, Auckland.1208
ZL1BT	Thorpe, G. B., 19 Rolleston Street, Kihikihi.2400
ZL1BU	Kealey, D. T., 3 Corinth Street, Meadowbank, Auckland.1105
ZL1BV	Birch, R. W., Riverside Drive, Whangarei.0101
ZL1BX	Smith, M. A., 32 Glenveagh Drive, Hillsborough, Auckland.1004
ZL1BY	Opotiki Branch 72 NZART (Inc), see Branch Directory
ZL1BZ	Howitt, I. M., 15 Frederick Street, Otorohanga.2554
ZL1CA	Wyllie, C. R., 6 Beverley Crescent, Hillcrest, Hamilton.2001
ZL1CB	Te Awamutu Amateur Radio Club Branch 40 NZART, see Branch Directory
ZL1CC	Birt, D. J., 3 Cheeseman Place, Meadowbank, Auckland.1105
ZL1CD	Baxendale, J., 224 Whitney Street, Blockhouse Bay, Auckland.1207
ZL1CE	Fields, R. E., Flat 2, 165 Abbotts Way, Remuera, Auckland.1106
ZL1CG	Sims, H., 8 Rata Street, Mangakino.2391
ZL1CH	Boyd, H. A., 13a Long Street, Torbay, Auckland.1310
ZL1CJ	Smith, B. W., Ruawaro, No. 2 R.D., Huntly.2191
ZL1CK	Martin, E. T., 109 Tony's Avenue, Totara, Thames.2801
ZL1CL	Leedom, C. A., 7 Crudge Street, Blockhouse Bay, Auckland.1207
ZL1CM	Prince, R. P., 104 Freyberg Street, Otumoetai, Tauranga.3001
ZL1CN	Woodfield, R. T., 46 Weaver Street, Whangarei.0101
ZL1CO	Birss, T. H. N., Kahawai Road, Glenbrook, R.D. 1, Waiuku.1852
ZL1CR	Ngakuru, R. A., 31 Wihongi Street, Kaikohe.0400
ZL1CS	Shaw, C. E., P.O. Box 2088, Whakatane.3400
ZL1CU	Curtis, N. C., 9 Taraire Road, Titirangi, Auckland.1230
ZL1CV	Firman, R. J., 19 Tainui Street, Onerahi, Whangarei.0101
ZL1CY	Webster, D. M., 46 Speight Road, Kohimarama, Auckland.1105
ZL1CZ	Duxbury, T. A., 338 St. Heliers Bay Road, Auckland.1105
ZL1DA	Wilde, C. J., 8 Newburn Road, Browns Bay, Auckland.1310
ZL1DB	Dugmore, K. F., 3 McBeth Drive, Te Puke.3071
ZL1DC	Hanley, A. B. D., 1/13 Koromiko Street, New Lynn, Auckland.1207
ZL1DD	Foster, A. E. G., 8 Tatyana Place, Massey, Auckland.1208
ZL1DE	Adshead, G. O., 22 Taylor Street, Avondale, Auckland.1207
ZL1DF	Thames Radio Club Branch 41 NZART (Inc), see Branch Directory
ZL1DG	Marsh, B. G., 49 Tranmere Road, Hamilton.2001
ZL1DH	Edwards, J. R., Messengers Road, R.D. 3, Silverdale.1462
ZL1DI	Logan, J. D., 21 Burton Place, Rotorua.3201
ZL1DJ	Hopkins, B. N., 133 Kitchener Road, Waiuku.1852
ZL1DK	Glucina, G., 31 Chelverton Terrace, Red Beach, Orewa.1461
ZL1DL	Birt, E., 41 Holland Road, Northcote, Auckland.1309
ZL1DM	Grayson, R. T., 25 Rembrandt Place, Papakura.1703
ZL1DN	Wishnowsky, R. E., 22 Okahu Road, Kaitaia.0500
ZL1DO	Harvey, G. F., 267 Mt Albert Road, Mt Roskill, Auckland.1003
ZL1DQ	Menendez, R. R., 43a Portland Road, Remuera, Auckland.1105
ZL1DR	Brooker, A. D., 35 Wordsworth Street, Leamington, Cambridge.2350
ZL1DS	Colquhoun, P. R., 41 Alison Road, Surfdale, Waiheke Island.1470
ZL1DT	Rowe, E. G., 2/24 Cromdale Avenue, Howick.1705
ZL1DV	Veale, R. S. (Mrs), 31 Rangitoto Avenue, Remuera, Auckland.1105
ZL1DW	Pryor, M. G., 8 Slater Place, Te Puke.3071
ZL1DX	Melville, R. A., 77 Wood Bay Road, Titirangi, Auckland.1207
ZL1DY	Crickett, J. L., 1 Tutchen Avenue, Raglan.2051
ZL1DZ	Heincen, M. J., 61 Haseler Crescent, Howick, Auckland.1705
ZL1FA	Greenaway, A. W., 11 Darraghs Road, Otumoetai, Tauranga.3001
ZL1FB	Bell, J. F. G., 21 Wymer Terrace, Hamilton.2001
ZL1FC	Pinder, A., 209 Victoria Road, Devonport, Auckland.1309
ZL1FD	Armstrong, D. K., Kaituna Road, R.D. 9, Te Puke.3071
ZL1FF	Gifford, A. B., 566/1 Teasdale Street, Te Awamutu.2400
ZL1FG	Booth, B. W. G., 8 Penney Avenue, Mt. Roskill, Auckland.1004
ZL1FH	Barkman, D. B., 903/45 Stanley Point Road, Devonport, Auckland.1309
ZL1FI	Power, W. T., 14 Hebe Place, Birkenhead, Auckland.1310
ZL1FJ	Lynch, R. N., 4140 Great North Road, Glendene, Auckland.1208
ZL1FK	Challinor, M. J., 31 Barrons Drive, Green Bay, Auckland.1207
ZL1FM	Robertson, J. S., 29 Cyclarama Crescent, Massey, Auckland.1208
ZL1FN	Keesing, S., 68 Swann Beach Road, Whangaparaoa, Auckland.1463
ZL1FP	Anchor, G. S., 46a May Street, Mt. Maunganui.3002
ZL1FQ	Faulkner, W. K., 22 Moenui Avenue, Orewa, Hibiscus Coast.1461
ZL1FR	Wood, R. S., 5 Takitimu Street, Orakei, Auckland.1105
ZL1FU	Hibiscus Coast Amateur Radio Club (Inc), see Branch Directory
ZL1FV	Runciman, G. J. (Mrs), 36 Cardiff Road, Pakuranga, Auckland.1706
ZL1FW	Flowers, J. V. E., 8 Regent Street, Tauranga.3001
ZL1FX	Hyde, K. G., 126b Te Atatu Road, Te Atatu South, Auckland.1208
ZL1FY	Armstrong, G. W., 5 Jervois Street, Kawerau.3452
ZL1FZ	Coates, K. J., 2 Bardia Street, Takapuna, Auckland.1309
ZL1GA	Hoy, M. H., 36 Sierra Street, Glendowie, Auckland.1105
ZL1GD	Carter, G. H., 21 Grand View Road, Hamilton.2001
ZL1GF	Fish, J. F., 14 Howard Road, Northcote, Auckland.1309
ZL1GI	Brumby, C. J., 5 Matuhi Rise, Henderson, Auckland.1208
ZL1GJ	Dobbing, S. J., 56 Pohutukawa Drive, Pukete, Hamilton.2001
ZL1GK	Boyle, J. O., 3 Camelia Grove, Parklands, Waikanae.6154

ZL1GL	Kelly, T. D., 35 Rawhitiroa Road, Kohimarama, Auckland.1105
ZL1GN	Beckham, D. S. R., 30 Normondy Road, Henderson, Auckland.1208
ZL1GO	Ogden, J. R., 88 Lynn Road, Glenfield, Auckland.1310
ZL1GP	Henderson, R. J., 87 Grange Road, Mt. Eden, Auckland.1003
ZL1GQ	Coates, W. W., 25 Tamihana Street, Matamata.2271
ZL1GR	Goodwin, L., 13 Stafford Street, Waihi.2991
ZL1GS	Webb, J. L., 1 Willow Place, Whangarei.0101
ZL1GT	Hooker, B. N. N., 9 Amorino Drive, Hibiscus Coast, Orewa.1461
ZL1GU	Rolfe, E. M., 41 Rangimarie Crescent, Snells Beach, Warkworth.1490
ZL1GV	Spackman, B. C. W., 15 Manuka Street, Matamata.2271
ZL1GW	Ross, P. R., 57 May Street, Hillcrest, Hamilton.2001
ZL1GX	Hannaford, J. W., 42 Waimarie Road, Whenuapai Village, Auckland.1450
ZL1GZ	Graham, E. W., 18 Seaway Terrace, Tauranga.3001
ZL1HB	Homer, H. L., 823 Te Atatu Road, Te Atatu, Auckland.1208
ZL1HC	Colegrave, A. H., 15b Moana Road, Gisborne.3801
ZL1HD	Dahl, K., Taratara Road, Kaeo.0556
ZL1HE	Lord, I. K., 41a Peninsula Club, 441 Whangaparaoa Road, Whangaparaoa.1463
ZL1HF	Harrison, N. D., 42b Taikata Road, Te Atatu North, Auckland.1208
ZL1HH	Cottle, D. J., Rainbow Falls, R.D. 2, Kerikeri.0452
ZL1HI	Boghurst, B. E., 70 Ostend Road, Ostend, Waiheke Island.1470
ZL1HJ	Gannon, M., 9 Liverpool Street, Te Kuiti.2500
ZL1HK	Carlyle, L. G. S., 2 Cotter Avenue, Remuera, Auckland.1105
ZL1HL	Carrel, J. L., 167 St Andrews Road, Epsom, Auckland.1003
ZL1HM	Harvey, S. A., 46 High Street, Rotorua, CPO Box 2002, Rotorua.3200
ZL1HP	Hamblyn, D. H., 11 Shelly Street, Leamington, Cambridge.2351
ZL1HQ	Davidson, D. M., 229 Akoranga Drive, Northcote, Auckland.1309
ZL1HR	Coles, J. P., 22 Richmond Street, Cambridge.2351
ZL1HS	Bearsley, C. I. N. (Mrs), R.D.1, Lagmhor/Tinwald Area.8330
ZL1HT	Hardie, B. G. S., P.O.Box 29101, Auckland.1030
ZL1HU	Garton, W. G., 15 Kotanui Avenue, Army Bay, Whangaparaoa.1463
ZL1HV	Godfrey, A. G., 882 East Coast Road, Browns Bay, Auckland.1310
ZL1HW	Dickinson, R., 8 Mawson Avenue, Torbay, Auckland.1310
ZL1HX	Rutherford, N. J., 32 Kirrie Avenue, Te Atatu South.1208
ZL1HY	Brown, D., 39 Haszard Street, Waihi.2991
ZL1HZ	Frederiksen, N. J., Mangatangi, R.D. 1, Pokeno.1872
ZL1IA	Pivac, I. G., 4271 Great North Road, Henderson, Auckland.1208
ZL1IB	Brown, E. E. A., 20 Gilmore Street, Te Puke.3071
ZL1IC	Holdsworth, R., Sexton Road, R.D. 1, Hamilton.2021
ZL1IE	Skinner, G., 15 Hepper Street, New Lynn, Auckland.1207
ZL1IG	Monks, J., 2/9 Abelia Place, Papatoetoe, Auckland.1701
ZL1IH	Intermann, R. H. D., 158 Richard Street, P.O. Box 412, Opotiki.3472
ZL1II	Green, G. P. C., 248 Otipua Road, Timaru.8601
ZL1IJ	Dunningham, N. M., 5 Kingswood Road, Papatoetoe.1701
ZL1IL	Everitt, K. M., P.O. Box 68217, Newton, Auckland.1001
ZL1IM	Carter, E. W. A., 3 Haines Terrace, Te Kuiti.2500
ZL1IN	Pearce, R. M., 125 New Windsor Road, Avondale, Auckland.1207
ZL1IO	McNamara, T. A., 32 Galileo Street, Ngaruawahia.2171
ZL1IP	Wiggens, F. V., 44 Westminster Drive, Tauranga.3001
ZL1IQ	Joseph, D. P., 51 The Drive, Epsom, Auckland.1003
ZL1IR	Douglas, L. M., 17 5th Avenue, Hamilton.2001
ZL1IS	Waikato VHF Group, see Branch Directory
ZL1IT	Hayman, G. L., 318 Jervois Road, Herne Bay, Auckland.1002
ZL1IU	Wallace, N. L., Waikaramu Road, Waimate North.0454
ZL1IV	Irving, G. W., 50 Glass Road, Mt Roskill, Auckland.1004
ZL1IX	Taylor, W. R., 65a Butterworth Drive, Glendene, Auckland.1208
ZL1IY	Cleland, D. E., 52 Alfred Street, Fairfield, Hamilton.2001
ZL1IZ	Waitomo Branch 55 NZART (Inc), see Branch Directory
ZL1JB	Nalder, C. H., Oruanui Road, R.D. 1, Taupo.3300
ZL1JC	Granger, P. L., 7 Trent Street, Avondale, Auckland.1207
ZL1JD	Evans, G. E., Gleeson Road, R.D.3, Waiuku.1852
ZL1JE	Blomfield, R. J., 5 Kent Street, Te Kuiti.2500
ZL1JF	Finlay, P. T., 62 Woodside Road, Henderson, Auckland.1208
ZL1JG	Dent, R. E., 18 McClintock Road, Massey, Auckland.1208
ZL1JH	Hodson, L., 71 Riverside Road, Orewa, Auckland.1461
ZL1JI	Hodgson, C. G. B., 123 Beaumonts Way Extn, Manurewa.1702
ZL1JJ	Wilson, H. W., 85 Domain Road, Papamoa.3070
ZL1JK	Schofield, J. R., 14a Casey Avenue, Hamilton.2001
ZL1JL	Wilson, W. O. B., c/- 8b Richmond Street, Hamilton.2001
ZL1JM	McIntyre, J., 3 Tihi Road, Rotorua.3201
ZL1JN	Turner, A., 140 Union Street, Howick.1705
ZL1JO	Walker, N. A., 14 Mawney Road, Henderson, Auckland.1208
ZL1JP	Buckton, J. V., 14 Cockle Bay Road, Howick, Auckland.1705
ZL1JR	Jones, J. W. W., 2/18 Meadowland Drive, Howick.1705
ZL1JS	Baker, M. R., Attwood Road, Tamaterau, R.D. 4, Whangarei.0121
ZL1JT	Turnwald, J. B., 29 Cliffview Drive, Green Bay, Auckland.1207
ZL1JU	Teviotdale, B. M., Fairbank Road, Rotorua.3201
ZL1JY	Field, A. N., 2 Wharepaina Crescent, Rotorua.3201
ZL1JZ	Davison, P. W., Poland Street, Waikino.2950
ZL1KC	Page, A., 6 Matai Place, Otaki.6171
ZL1KF	Cholmondeley-Smith, D. R., 20 Sharon Road, Waiake, Auckland.1310
ZL1KG	Ramsay, R. J., 120 Kamo Road, Whangarei.0101
ZL1KH	Turton, J. W., C/- Puriri Park Holiday Resort, Private Bag, Orewa.1461
ZL1KI	Horwood, E. W., 233 King Street, Whakatane.3400
ZL1KK	Carter, N. A. W., 50 Victoria Avenue, Whakatane.3400
ZL1KL	Paton, E. J., 32 Pohutukawa Road, Whenuapai.1450
ZL1KM	Gardner, D. R., 111 Hinemoa Street, Rotorua.3201
ZL1KQ	Small, J., 32 Paddington Street, Glen Innes, Auckland.1106
ZL1KT	Teviotdale, D. A., Fairbank Road, Rotorua.3201
ZL1KU	Oliver, M. J., 19a Elbourne Street, Taradale, Napier.4001
ZL1KV	Pooley, E. A., 2 Ayr Street, Waihi Beach.2990
ZL1KW	Kawerau Branch NZART (Inc), see Branch Directory
ZL1KX	Walford, K. W., 354 Somme Parade, Aramoho, Wanganui.5002
ZL1KY	Yearsley, E. S., 37a Hattaway Avenue, Bucklands Beach.1704
ZL1KZ	Ellery, H. F., 26 Catalina Crescent, Takapuna, Auckland.1310
ZL1LA	Rolfe, R. L., 16 Stillwater Crescent, R.D. 3, Silverdale.1462
ZL1LB	Laurent, L. M., 54 Lagoon Drive, Panmure, Auckland.1106
ZL1LC	Bird, W. A., 239 Nelson Street, Invercargill.9501
ZL1LD	Williams, P. M. (Mrs), 144 Titirangi Road, New Lynn, Auckland.1207
ZL1LE	Egan, B., 12 Island View Terrace, Howick, Auckland.1705
ZL1LF	Elder, J. W., 17 Cedar Road, Mt. Eden, Auckland.1004
ZL1LH	Cowie, D. J., 5 McCrystal Avenue, Bucklands Beach, Auckland.1704
ZL1LI	Hughes, P. D. P., 17 Oscar Road, Greenhithe, Auckland.1450
ZL1LK	Sargon, R. P., 2a Enderby Drive, Te Atatu North, Auckland.1208
ZL1LL	Cook, S., 27 Neville Street, Point Chevalier, Auckland.1002
ZL1LM	Marsden, A. N., 9 Wanaka Place, Pakuranga, Auckland.1706
ZL1LN	Simmons, A. L., 69 Roberts Avenue Extension, Bayswater, Auckland.1309
ZL1LO	Robinson, I., 40 Masterton Road, Rothesay Bay, Auckland.1310
ZL1LP	Parsons, E. R., 509/1 Mutu Street, Te Awamutu.2400
ZL1LQ	Ball, W. G., C/- 67a Hattaway Avenue, Bucklands Beach, Auckland.1704
ZL1LR	Anderson, P. C., 32 Gilmore Street, Waihi.2991
ZL1LS	McTurk, E. C. (Mrs), 40 Silverton Road, Waihi.2991
ZL1LU	Heslop, W. T., 19 Corinna Street, Welcome Bay, Tauranga.3001
ZL1LX	Barltrop, C., 228 Old Taupo Road, Taumarunui.2600
ZL1LY	Brown, K. L., 38 Thompson Street, Tokoroa.2392
ZL1LZ	Dunwoody, M. L., 126 Bridgeman Road, Te Awamutu.2400
ZL1MA	Small, T. H., 32b Martin Road, Manurewa.1702
ZL1MB	Farley, W. F., 8 Puriri Avenue, Te Puke.3071
ZL1MC	Hume, S. T., 17 Humber Crescent, Gate Pa, Tauranga.3001
ZL1ME	Geard, M., 1/30a Walter Street, Takapuna, Auckland.1309
ZL1MF	Crabtree, A. W., 37 Martin Road, Waihi.2991
ZL1MG	Moore, J. P., 29 Valley Road, Rocky Bay, Waiheke Island.1470
ZL1MJ	Schwass, B. R., 24 Mokorua Grove, Whakatane.3400
ZL1ML	Lee, M. E., 28 Seaview Road, Tawaipareira, Waiheke Island.1470
ZL1MM	Garde-Browne, M., Bowemtown Road, Athenvee, R.D.2, KatiKati.3051
ZL1MN	Nisbet, D. I., 4 Williams Avenue, Kaikohe.0400

ZL1MO	Spackman, I. H., 124c Taylor Street, Blockhouse Bay, Auckland.1207
ZL1MP	Poulton, G. G., 7 Rickard Place, New Lynn, Auckland.1207
ZL1MQ	Betson, C. W., 140 Golf Road, Green Bay, Auckland.1207
ZL1MR	Irwin, P. M., 29 Glendale Road, Whangarei.0101
ZL1MS	Inder, J. H., 19 Rushton Avenue, Otumoetai, Tauranga.3001
ZL1MU	Crooks, D. M., 13 Burrows Avenue, Karori, Wellington.6005
ZL1MV	Garrard, R. C., 76 Dalwhinnie Parade, Howick, Auckland.1705
ZL1MW	Huggard, B. F., 12 McClintock Road, Massey, Auckland.1208
ZL1MX	Currie, D. J., 127 Ridge Road, Howick.1705
ZL1MY	Jamieson, A. S. (Miss), 99 Frederick Street, Hillsborough, Auckland.1106
ZL1MZ	Karl, P. J., Main Road, Ohaupo.2452
ZL1NA	Wilson, G. D., 1 Mt Roskill Road, Mt. Roskill, Auckland.1004
ZL1NB	Hitch, G. W., Rawhiti Road, R.D. 4, Hikurangi.0251
ZL1NC	Miller, J. G., 31 Sierra Street, Glendowie, Auckland.1105
ZL1ND	Cobbe, D. J., C/- D. T. Tremayne, 149 Spencer Road, Lake Tarawera, Rotorua.3201
ZL1NF	Garrett, R., 13 Rockisle Road, Torbay, Auckland.1310
ZL1NG	Muller, J., 29 Newhaven Terrace, Mairangi Bay, Auckland.1310
ZL1NH	White, N. R., 33 Norton Road, Otumoetai, Tauranga.3001
ZL1NI	Thornewell, M. T., Pearson Street, Mangawhai.0270
ZL1NJ	Ecclesfield, B. D., 1333 Cameron Road, Greerton, Tauranga.3001
ZL1NK	Mander, N. K., 38 Arundel Street, Mt. Roskill, Auckland.1004
ZL1NM	Crocker, T. W., 70 Rosehill Drive, Papakura.1703
ZL1NN	Douglas, J. W., 91 Churchill Road, Rothesay Bay, Auckland.1310
ZL1NP	Peart, L. C., 6 Campbell Road, Maraetai Beach.1705
ZL1NQ	Barrell, S. J., Waitaua Road, Vinegar Hill, Whangarei.0101
ZL1NR	Edmonds, J. A., 92 Beach Road, Ahipara.0551
ZL1NS	Hickey, J., 14 Frances Street, Manurewa.1702
ZL1NT	Hill, B. J., 169 Rimu Street, Hamilton.2001
ZL1NU	Griffiths, K. B., 64 Arawa Street, New Lynn, Auckland.1207
ZL1NV	Jackson, B. T., 3a Ross Crescent, Orewa, Hibiscus Coast.1461
ZL1NX	Baveystock, S. C., 2 Fraser Street, Tauranga.3001
ZL1NY	Frater, D., 8 Wayne Place, Mt. Roskill, Auckland.1004
ZL1NZ	Duthie, D. A., Morrisons Road, Matapouri Bay, Northland.0250
ZL1OA	Jack, M. C., 6b Clare Place, Glenfield, Auckland.1310
ZL1OC	Shaw, V. (Mrs), P.O. Box 2088, Whakatane.3400
ZL1OD	Wallace, J. A. L., 1346 Whangaparaoa Road, Whangaparaoa.1463
ZL1OF	Wapp, A., Waiuku Road, Pukeoware, R.D. 1, Waiuku.1852
ZL1OG	Lambie, L. B., Moumoukai Valley Road, R.D.3, Papakura.1733
ZL1OH	Fairhead, A. D., Harry Dreadon Road, R.D. 4, Papakura.1733
ZL1OI	Bourne, H. K., 54 Whitehaven Road, Glendowie, Auckland.1105
ZL1OJ	Dowling, H. J., 52 Aurora Terrace, Hillcrest, Hamilton.2001
ZL1OL	Oliver, B. M., 65 Archers Road, Glenfield, Auckland.1310
ZL1OM	Windsor, K. W., 36 Chatswood Grove, Birkenhead, Auckland.1310
ZL1ON	Eglinton, G. K., 20 Mahoe Street, Matua, Tauranga.3001
ZL1OO	Dreaver, B. G. W., 5 Essex Street, Te Atatu South, Auckland.1208
ZL1OQ	Renfrew, H. F., 37 Great North Road, Warkworth.1492
ZL1OR	Mullions, R. E., 37 Williams Avenue, Morrinsville.2251
ZL1OV	Kirton, F. N., 14 Dennis Avenue, Manurewa.1702
ZL1OW	Burrows, J. W. L., R.D. 1, Lower Kaimai, Tauranga.3021
ZL1OX	Crawley, H. V., 5/238 Onewa Road, Birkenhead, Auckland, P.O.Box 34 075, Birkenhead.1330
ZL1OY	Mudford, K. H., Pikonui Road, Richmond Downs, R.D. 1, Walton.2273
ZL1PA	Papworth, A. G., 27 Alnwick Street, Warkworth, P.O. Box 32.1492
ZL1PB	Hanlon, K. R., 1/4 Pine Road, Orewa.1461
ZL1PC	Lewis, E. C., 54 Sylvan Valley Avenue, Titirangi, Auckland.1207
ZL1PF	Conlon, P. W., 166b Hinemoa Street, Rotorua.3201
ZL1PG	Morgan, J. A., 38 Dreadon Road, Manurewa.1702
ZL1PH	Yates, C. M., Linwood Road, Karaka, R.D. 1, Papakura.1733
ZL1PI	McDonald, A. K., 8 Francis Street, Whakatane.3400
ZL1PJ	Dare, P. H., 19 Glenfield Road, Rotorua.3201
ZL1PK	King, P. D., 11 Salmond Place, Hamilton., P.O.Box 126, Hamilton.2000
ZL1PL	Grise, M. J., 109 Norwood Road, Bayswater, Auckland.1309
ZL1PM	Neaverson, L. L., Riverview Road, Keri Keri.0452
ZL1PO	Bullin, G. K., 32 Otumoetai Road, Tauranga.3001
ZL1PR	Farrell, J. F., 56 Bellmont Avenue, Chartwell, Hamilton.2030
ZL1PS	Brown, T. G., 2 Hilstan Place, Onehunga, Auckland.1106
ZL1PT	Twiss, D. P. L., 4/77 Old Lake Road, Devonport, Auckland.1309
ZL1PU	Nathan, I. J., 92 Masters Avenue, Hillcrest, Hamilton.2001
ZL1PV	Gulde, N. G., 182 16th Avenue, Tauranga.3001
ZL1PW	Wrigley, P. H., 34 Clifford Street, Kaikohe.0400
ZL1PX	Martin, H. L., 25 Cockayne Crescent, Sunnynook, Auckland.1310
ZL1PY	Bates, L. F. W., 34a Manly Park Avenue, Whangaparaoa.1463
ZL1PZ	Sexton, I. M., 10 Fair Oaks, Pukekohe.1800
ZL1QB	Manukau Branch NZART (Inc), see Branch Directory
ZL1QC	Strachan, J. M., 44 Stredwick Drive, Torbay, Auckland.1310
ZL1QG	Morris, D. C., 5 Woodside Road, Henderson, Auckland.1208
ZL1QH	Cooke, S. R., 166 Ridge Road, Howick, Auckland.1705
ZL1QI	Gillett, P. A., P.O. Box 3074, Tauranga.3000
ZL1QJ	Nissen, K. H., Back Street, Opua.0290
ZL1QK	Stone, W. H., 5 Winslowe Place, Papakura.1703
ZL1QL	Borck, L. J. F., 6 Curtis Street, Whangarei.0101
ZL1QM	Ockleston, G. W., 17 Bracken Avenue, Epsom, Auckland.1003
ZL1QN	Hedges, K., 244 Titirangi Road, New Lynn, Auckland.1207
ZL1QO	Elowsson, B. W., 9 Sanctuary Point, Pakuranga.1706
ZL1QP	Breden, J. E., 27 Moehau Street, Te Puke.3071
ZL1QQ	Bush, G. H., 24 Rushton Avenue, Otumoetai, Tauranga.3001
ZL1QS	Mason, J. F., 59 Lancaster Road, Birkdale, Auckland.1310
ZL1QU	Marshall, J. R., 14 Hapua Place, Taupo.3300
ZL1QV	Young, L. G., Brooklands, Harkness Road, R.D.1, Papakura.1733
ZL1QX	Mowatt, G. C., 37 Cliff Road, St. Heliers, Auckland.1105
ZL1QY	Williams, R. G., 67a Botanical Road, Tauranga.3001
ZL1QZ	Rhodes, M. C. L., Flat 2, 11a Rutherford Terrace, Meadowbank, Auckland.1105
ZL1RA	Swain, R. A., Tombleson Road, Otautu Bay, Rotoehu, R.D.4, Rotorua.3221
ZL1RB	Grant, E. W., Barry Road, Waihi.2991
ZL1RC	Saunders, A. G., 14 Queenwood Avenue, Hamilton.2001
ZL1RF	Matamata Amateur Radio Club, see Branch Directory
ZL1RG	Rentoul, J. M., 15 McCracken Avenue, Hamilton.2001
ZL1RH	Claridge, A. R. C., Waitetoko, R.D. 2, Turangi.3371
ZL1RI	McLaughlin, J., 60 Awatere Avenue, Beerescourt, Hamilton.2001
ZL1RJ	Jarlov, R. W. E., 85 Mallard Drive, Rotorua.3201
ZL1RK	Western Suburbs Radio Club, see Branch Directory
ZL1RL	Fitchett, S. A., 2 Kahu Road, Panmure, Auckland.1106
ZL1RM	Jeffs, J. F. C., 77 Pohutukawa Drive, Hamilton.2001
ZL1RN	Lewis, K. J., 25 Magee Place, Hamilton.2001
ZL1RO	Knox, A. T., 11 Hasbury Avenue, Epsom, Auckland.1003
ZL1RP	Bryce, D. G., 95 Awatapu Drive, Whakatane.3400
ZL1RR	Ryan, D. F., 129 Cook Street, Howick.1705
ZL1RS	Boggiss, R. J., 8 Silverton Road, Waihi.2991
ZL1RT	Maginnity, D., 5 Tidd Drive, Raglan.2051
ZL1RU	Harrison, L. R., c/- 28 Castledine Crescent, Glen Innes, Auckland.1106
ZL1RV	Gilbert, J. L., Flat 1a, 75 Owens Road, Epsom, Auckland.1003
ZL1RW	Wilson, R. M., 78a Arney Road, Remuera, Auckland.1105
ZL1RY	Shimmin, R. L., 130 Union Road, Howick, Auckland.1705
ZL1RZ	Shead, K. F. S., 8 South Pacific Place, Henderson, Auckland.1208
ZL1SA	Franklin Branch NZART (Inc), see Branch Directory
ZL1SB	Sapich, S., Forest Hill Road, R.D. 1, Henderson, Auckland.1231
ZL1SC	Corrigan, M. L., Flat 4, 278 Birkdale Road, Birkdale, Auckland.1310
ZL1SD	Colquhoun, R.D., 32 Valley Road, Mt Eden, Auckland.1003
ZL1SE	Riddle, M. W. C., 35c Emmett Street, Greerton, Tauranga.3001
ZL1SF	Cooper, M. A., 60 Old Te Kuiti Road, Otorohanga.2554
ZL1SG	Cowie, C. A., Stratford Drive, Cable Bay, R.D.3, Kaitaia.0500
ZL1SH	Adair, M. W., 41 Seavista Avenue, Birkdale, Auckland.1310
ZL1SI	Caskie, W. I., Flat 3, 461 Blockhouse Bay Road, Blockhouse Bay, Auckland.1207
ZL1SJ	Holmes, G. C., 60b Kings Road, Panmure, Auckland.1106
ZL1SK	Thomas, M. R., 52 Bollard Avenue, Avondale, Auckland.1207
ZL1SO	Miller, R. L., 52 Hinekura Avenue, Taupo.3300
ZL1SP	Bain, F. J., 58 George Crescent, Buckland, R.D. 2, Pukekohe.1800
ZL1SQ	Van Den Heuvel, T., 9 Laing Place, Otumoetai, Tauranga.3001
ZL1SR	Coppell, B. L., 128a James Street, Whakatane.3400

ZL1SS	Skellon, D. B., 36 Mountbatten Avenue, Glenfield, Auckland.1310
ZL1ST	Smith, N. E., 7 Kelwyn Road, Kelston, Auckland.1207
ZL1SU	MacDiamid, D. R. N., Hone Heke Road, Kerikeri.0452
ZL1SV	Perkins, J. A., 2 Ponui Place, Mairangi Bay, Auckland.1310
ZL1SW	Curling, L. K., 14 Clotworthy Crescent, Onerahi, Whangarei.0101
ZL1SX	Kirkham, A. L., 38 Waller Avenue, Bucklands Beach.1704
ZL1SY	Thompson, M. G., 13 McDowell Street, Rotorua.3201
ZL1SZ	Evans, M. J., 14 Henderson Street, Whakatane.3400
ZL1TA	Mortensen, N. R., 16 Melrose Road, Hillsborough, Auckland.1004
ZL1TB	Howick and District Branch NZART (Inc.), see Branch Directory
ZL1TC	Metcalfe, A. D., 24 Hogan Street, Hamilton.2001
ZL1TD	Corby, D. G., 129 Raumanga Valley Road, Whangarei.0101
ZL1TE	Lynneberg, R., 15 Terewha Street, Turangi.3371
ZL1TF	Morrison, I. McG., 31a Telstar Place, Birkenhead, Auckland.1310
ZL1TG	Rumming, E., 50 Corlett Street, Rotorua.3201
ZL1TI	Godkin, I. P., 45 The Boulevard, Pakuranga.1706
ZL1TJ	Matthys(Snr), J. K. C., 2 Thwaites Place, Cambridge.2351
ZL1TK	Harrington, R. J., 5/28 St Stephens Avenue, Parnell, Auckland.1001
ZL1TL	Pickworth, R. A., 20 Nen Street, Oamaru.8901
ZL1TM	Spence, K. L. J., 28 Chorley Avenue, Henderson, Auckland.1208
ZL1TN	Barron, K. H., 230 Riddell Road, Glendowie, Auckland.1105
ZL1TO	Potter, J. W., 52/36 McLeod Road, Henderson, Auckland.1208
ZL1TP	Tauranga Branch NZART (Inc.), see Branch Directory
ZL1TQ	Elliott, K. G., 17 Red Bluff Rise, Campbells Bay, Auckland.1310
ZL1TS	Prentice, L. G., 5 Mountain View Road, Morningside, Auckland.1003
ZL1TT	Roberts, R. L., 39 Kay Drive, Blockhouse Bay, Auckland.1207
ZL1TU	Bond, P. L., 1340 Whangaparaoa Road, Whangaparaoa.1463
ZL1TW	Barnett, E. K., Bethlehem, R.D. 1, Tauranga.3030
ZL1TY	Monk, W. K. G., Matipo Avenue, Rotorua.3201
ZL1TZ	Stewart, G. W., 31 Levers Road, Tauranga.3001
ZL1UA	Harvey, J. K., 4 West Street, Waihi Beach., P.O.Box 10, Waihi Beach.2990
ZL1UB	Wilson, D. A., 1/35 Rangitoto Terrace, Milford, Auckland.1309
ZL1UC	South Pacific DX Contest Group, (Trustees: ZL1BXA, ZL1BTZ), C/- H. Buxton, 32 Castleton Street, Birkdale, Auckland.1310
ZL1UD	Williams, K. G., 6 Kiwi Street, Matamata.2271
ZL1UE	Williams, M. K., Jury Road, R.D. 10, Frankton.2031
ZL1UG	Redgrave, C. I., R.D. 1, South Kaipara Heads, Helensville.1451
ZL1UH	Mathieson, V. J., 99c Queen Street, Waiuku, Auckland.1852
ZL1UI	Cardno, I. M., 5b Keldale Place, Forrest Hill, Auckland.1310
ZL1UJ	Jenner, K. W., 15 Garmons Way, Milford, Auckland.1309
ZL1UK	Beech, S. C., 53 Pupuke Road, Northcote, Auckland.1309
ZL1UL	Gilmore, G. H., Gilmore Road, Tuhikaramea, Hamilton.2001
ZL1UM	Chamberlin, J. H. W., Kawakawa Bay Road, Clevedon.1751
ZL1UO	Girbin, R. A., 43a Maunu Road, Whangarei.0101
ZL1UP	Hall, E. W. H., 4 Bellevue Road, Tauranga.3001
ZL1UQ	Vermeer, J. H., c/- Post Office, Waimamaku, South Hokianga.0474
ZL1US	Armstrong, M. A. S., 77 Queen Street, Pukekohe.1800
ZL1UT	Still, W. J., 14 Meadowbank Road, Meadowbank, Auckland.1105
ZL1UU	Twadell, A. S., 7 Prince Regent Drive, Pakuranga.1706
ZL1UV	Morch, J. H. S., 13 Marina Road, Torbay, Auckland.1310
ZL1UW	Tinsley, H. G., 18 Grandview Road, Hamilton.2001
ZL1UX	Hamilton Branch NZART (Inc.), see Branch Directory
ZL1UY	Downard, T. V. E., 13 Riverlea Drive, Katikati.3051
ZL1UZ	Truman, A. R., 63 Clark Road, Papakura.1703
ZL1VA	Jessup, G. R., see overseas members
ZL1VC	Hall, L. J., 7 Kiwi Street, Matamata.2271
ZL1VD	Cutler, J. L., 12 The Companion Way, Whitby.6253
ZL1VE	Webber, H. W. B., 19 Pamela Place, Tauranga.3001
ZL1VF	Moller, L. J., 2/50 Sikkim Crescent, Wiri, Auckland.1701
ZL1VG	Bicheno, N. C., 100 Wood Bay Road, New Lynn, Auckland.1207
ZL1VH	Sanne, J. H., 49 Cameron Road, Hamilton.2001
ZL1VI	Rubie, A. E., 4 Citrus Avenue, Waihi Beach South.2990
ZL1VJ	Page, A. E., 4 Vivian Drive, Omokoroa, Tauranga.3001
ZL1VK	Papakura Branch NZART (Inc.), see Branch Directory
ZL1VM	Arnold, R. R., 21 Seaview Road, Milford, Auckland.1309
ZL1VN	McKain, M. L., 25 Marlow Drive, Cambridge.2351
ZL1VO	Whillans, F. L., 4/35 Killarney Street, Takapuna, Auckland.1309
ZL1VR	Gilligan, C. R., 4 Lambert Street, Abbotsford, Dunedin.9006
ZL1VS	Deverall, W. H., 24 Deuxberry Avenue, Northcote, Auckland.1309
ZL1VU	McIsaac, A. J., 26 Ferry Parade, Herald Island, Auckland.1450
ZL1VV	Kempson, C. M., 3 Horopito Road, Waikanae.6154
ZL1VW	Nasmith, M. K., 2/10 Jenelin Road, Henderson, Auckland.1208
ZL1VZ	Frieberg, A. G., Unit 2, 15 John Davis Road, Mt. Roskill, Auckland.1004
ZL1WB	Rowlings, B. H., 6 Mason Street, Onerahi, Whangarei.0101
ZL1WC	Rickard, P. V., 25 Balgowan Terrace, Conifer Grove, Takanini, Auckland.1702
ZL1WD	Davey, W. C., 165 Riddell Road, Glendowie, Auckland.1105
ZL1WF	McNae, G. S., 10 Manaia View Road, One Tree Point, R.D. 1, Ruakaka.0253
ZL1WG	Boric, H. V., 27 Cleary Road, Panmure, Auckland.1106
ZL1WH	Coe, P. H., 21 Marshall Avenue, Taupo.3300
ZL1WI	Milam, R. E., 184 Sturges Road, Henderson, Auckland.1208
ZL1WJ	Sainsbury, J. R. D., 15 Beechwood Road, Browns Bay, Auckland.1310
ZL1WK	MacDonald, J. E., 171 Cook Street, Howick, Auckland.1705
ZL1WL	Clarke, R. F. R., 26 Kendale Drive, Mathesons Bay, Leigh, Auckland.1490
ZL1WN	Biggar, R. G., P.O.Box 12525, Penrose, Auckland.1135
ZL1WO	McGechie, P. C., 14 Auckland Road, Warkworth.1492
ZL1WP	Johnstone, M. R., 268b Great South Road, Manurewa.1702
ZL1WQ	Whitehead, E. J., House 59, Tokanui Village, Private Bag, Te Awamutu.2400
ZL1WR	Cullen, R. G., 77 Fairview Road, Te Awamutu.2400
ZL1WT	Cummins, S. C., 682 Pakura Street, Te Awamutu.2400
ZL1WU	Moseley, M. R., 34 Domain Street, Waiuku.1852
ZL1WV	Fleetwood, F., 2/10 Tina Place, Pakuranga, Auckland.1706
ZL1WW	Jensen, J. T., 106 Victoria Street, Pukekohe.1800
ZL1WY	Yorke, R., 19 McLean Avenue, Papatoetoe.1701
ZL1WZ	Deslandes, E. N., Rimu Road, R.D., Oratia.1230
ZL1AAA	Gordon, B. D., 11 Siota Crescent, Kohimarama, Auckland.1105
ZL1AAB	Cardy, K. G., 28 City View Terrace, Birkenhead, Auckland.1310
ZL1AAC	Hammond, K. F., 14 Coppelia Avenue, Omokoroa, R.D. 2, Tauranga.3050
ZL1AAD	Lee, J., Whanarua Bay, Private Bag 1011, Opotiki.3472
ZL1AAE	Yearsley, J. K., R.D. 6, Tauranga.3021
ZL1AAF	Walker, R. L., 8 Faulkner Park, Taumarunui.2600
ZL1AAH	Backhouse, R. B., Ararimu Valley Road, R.D. 2, Waimauku.1455
ZL1AAI	De Jong, J. W., 29 Moire Road, Massey, Auckland.1208
ZL1AAJ	Williams, H. J., 30 Halberg Street, Glenfield, Auckland.1310
ZL1AAK	Stephens, C. H. L., 56 Karaka Street, Takapuna, Auckland.1309
ZL1AAM	Scott, P. L., 25 Chatsworth Crescent, Pakuranga.1706
ZL1AAN	Falkner, H. T., 8 Kapai Street, Devonport, Auckland.1309
ZL1AAO	Steel, L. B., The Shieling, R.D.4, State Highway 30, Rotoiti.3250
ZL1AAP	Swift, L. W., 53 Lucerne Road, Remuera, Auckland.1105
ZL1AAQ	Palmer, W. J., 168 Birkdale Road, Birkdale, Auckland.1310
ZL1AAR	Terrill, R., 3f Faith Bullock Place, New Lynn, Auckland.1207
ZL1AAS	Litten, R. J., 146 Sandspit Road, Howick, Auckland.1705
ZL1AAU	Elley, C. B., 14 Handley Place, Onerahi, Whangarei.0101
ZL1AAV	Aberhart, E. R., 2/37 McRae Road, Mt Wellington, Auckland.1106
ZL1AAW	Berntsen, B. M., 2 Te Mahoe Power Station Village, Te Teko.3456
ZL1AAX	Andrews, G. S., 29 Buchanan Place, Rotorua.3201
ZL1AAY	King, O. L., 8 Gracechurch Drive, Papatoetoe, R.D., Auckland.1734
ZL1AAZ	Pratt, W. R., 304 Shakespeare Street, Cambridge.2351
ZL1ABA	Jefferies, S. E., 60 Middleton Road, Remuera, Auckland.1105
ZL1ABB	Russell, M. C., 25 Sturdee Road, Manurewa, Auckland.1702
ZL1ABC	Biddle, R. R., 55 Becroft Drive, Forrest Hill, Auckland.1310
ZL1ABD	Wise, F. B., 14 Royal Road, Massey, Auckland.1208
ZL1ABF	Rubie, E. S., 14 Ambler Avenue, Glen Eden, Auckland.1207
ZL1ABG	Rae, D., 12 Pirika Street, Dargaville.0300

ZL1ABH	Williamson, T. J., Yacht Capella, P.O.Box 25111, St Heliers, Auckland.1130
ZL1ABI	Maggs, A. R., 32 Potter Avenue, Northcote, Auckland.1309
ZL1ABJ	Fergusson, D. D., Flat 1, 2 Ascot Place, Te Awamutu.2400
ZL1ABK	Yule, I. A., 6 Awatere Place, Snells Beach, Auckland.1490
ZL1ABL	Dale, A. J., 61 Rodney Street, Wellsford.1493
ZL1ABM	Humphrey, M. L. G., 1009 Tararu Road, Thames.2801
ZL1ABN	Reay, M. J. F., 16 Priscilla Crescent, Hamilton.2001
ZL1ABP	Rutter, K. L., 26 Halsey Drive, Lynfield, Auckland.1004
ZL1ABQ	McGill, A. K., 15 Manapouri Place, Pakuranga.1706
ZL1ABR	Skinner, R. E., 23 Seddon Avenue, Waihi.2991
ZL1ABS	Sheffield, M. J., Albany Highway, R.D. 4, Albany, Auckland.1310
ZL1ABT	Stead, G. M., 93 White Swan Road, Mt. Roskill, Auckland.1004
ZL1ABU	Lyall, G., 25 Nikau Street, New Lynn, Auckland.1207
ZL1ABW	Oldfield, A. J., 11 Collingwood Road, Waiuku.1852
ZL1ABX	Dukes, J. R., 102 Awaruku Road, Torbay, Auckland.1310
ZL1ABY	Hume, D. S., 91 Eivers Road, Whakatane.3400
ZL1ABZ	Johnson, I. P., 36 Cullen Crescent, Tokoroa.2392
ZL1ACA	Whittaker, J. C., Carter Road, Oratia, Auckland.1207
ZL1ACB	Gaylard, G. C., 3 Michael Avenue, Dinsdale, Hamilton.2001
ZL1ACC	Davies, J. H., 22 Harapaki Road, Meadowbank, Auckland.1105
ZL1ACF	Abbott, P. N., 1 Douglas McLean Avenue, Napier.4001
ZL1ACG	Caldwell, E. G., 23 Clyma Place, Massey, Auckland.1208
ZL1ACH	ten Velde, R. J. M., 8 Matipo Place, Tokoroa.2392
ZL1ACJ	Turner, R. H., 7 Keiss Street, Blenheim.7301
ZL1ACK	Marshall, R. F., Flat 1, 1 Mt Eden Road, Auckland.1003
ZL1ACL	Field, M. L., 11 Featon Road, Waihi.2991
ZL1ACM	Daniels, S. G., 26 Albert Road, Devonport, Auckland.1309
ZL1ACN	Messent, D. L., Main Road, Murupara., P.O.Box 23, Murupara.3272
ZL1ACO	Grusning, H. N., 48 Beattys Road, Pukekohe.1800
ZL1ACR	Ramsay, F. M., Te Ranga Estate, R.D. 4, Kaeo.0556
ZL1ACS	Clarke, J. K., 106 Bassett Road, Remuera, Auckland.1105
ZL1ACT	Bate, A. M., 1b Pacific Avenue, Mt. Maunganui.3002
ZL1ACU	Robson, J. D., 9/130 Boundary Road, Blockhouse Bay, Auckland.1207
ZL1ACV	Twiss, D. G. L., 4 Williams Street, Taupo.3300
ZL1ACW	Campbell, C. W., View Road, Hikurangi.0251
ZL1ACX	Rous, B. W., 56 Tamahere Drive, Glenfield, Auckland.1310
ZL1ACY	Billing, C. J., 2 Norfolk Road, Stanmore Bay, Whangaparaoa.1463
ZL1ACZ	Williams, B. C., 4 Kay Drive, Blockhouse Bay, Auckland.1207
ZL1ADA	Carr, R. F., 32 Kentigern Close, Pakuranga, Auckland.1706
ZL1ADB	Ataya, P. G. E. G., 4204 Great North Road, Henderson, Auckland.1208
ZL1ADC	Meharry, R. G., 111 Clarkin Road, Fairfield, Hamilton.2001
ZL1ADD	Irving, E. B., 26 Dudley Avenue, Huntly.2191
ZL1ADE	Duffy, E. J., 19 Princes Avenue, Mt. Roskill, Auckland.1004
ZL1ADF	Evetts, B., 208 James Street, Whakatane.3400
ZL1ADG	Hunt, C. W., C/- Post Office, Hangatiki, S.H.3, Otorohanga.2550
ZL1ADH	Nichols, D. E. G., 8 School Road, Te Atatu, Auckland.1208
ZL1ADI	Rademacher, C. A., Wrights Road, R.D. 2, Albany.1331
ZL1ADJ	Anderson, L. J., 19a Tui Glen Road, Birkenhead, Auckland.1310
ZL1ADL	Wilkins, D. N., 5 Ethel Street, Sandringham, Auckland.1003
ZL1ADM	de Lacey, N. E., 1 Hall Street, Frankton, Hamilton.2001
ZL1ADP	Medland, F. J., 882 Whangaparaoa Road, Whangaparaoa.1463
ZL1ADQ	Lawrence, P., 36 Patons Road, Howick.1705
ZL1ADR	Reinhard (Jnr), P. A., Mangataraire, R.D.2, Mangonui.0557
ZL1ADS	Tibbles, W. J., 19 Kotanui Street, Army Bay, Whangaparaoa.1463
ZL1ADT	Orr, K. R., 127 Grafton Road, Grafton, Auckland.1003
ZL1ADV	Reynolds, E. W., 13 Coronation Street, Takapuna, Auckland.1309
ZL1ADW	Clark, B. E., 88 Lincoln Park Avenue, Henderson, Auckland.1208
ZL1ADX	The Church of Jesus Christ of Latter Day Saints Radio Club, (Trustee: ZL1BJU), P.O.Box 33 798, Takapuna, Auckland.1332
ZL1ADY	Purdie, M. D., 41 Hayr Road, Auckland.1004
ZL1ADZ	Did-Dell, R. J., 805 Queen Street, Thames.2801
ZL1AFA	James, D. L., 8 Kesteven Avenue, St. Heliers, Auckland.1105
ZL1AFB	Offord, J. L., 43 Queens Road, New Plymouth.4601
ZL1AFC	Neighbours, E. R., 210 Grange Road, Otumoetai, Tauranga.3001
ZL1AFD	Osborne, R., Waikite Road, Tauranga.3001
ZL1AFE	De Renzy, P., Puketutu Road, R.D. 2, Matamata.2271
ZL1AFF	Fleming, J., 43 Burns Street, Leamington, Cambridge.2351
ZL1AFG	Hogg, O. B., 743 Maunganui Road, Mt Maunganui.3002
ZL1AFI	Chapman, A. F., 17 Baker Street, Ashburton.8300
ZL1AFJ	Phillips, J. F. E., 36 Mt Roskill Road, Mt Roskill, Auckland.1004
ZL1AFK	Welch, D. H., 59 Turanga Road, R.D. 1, Henderson, Auckland.1208
ZL1AFL	Flatt, D. A., Maungakaramea Road, Oakleigh, Whangarei.0101
ZL1AFM	Bellamy, P. R., 36 Eaton Road, Hillsborough, Auckland.1004
ZL1AFN	Monks, W. J. S., 53 Vernall Street, Hamilton.2001
ZL1AFO	Rogers, G. A., Spain Road, Awanui, Whangarei.0552
ZL1AFP	Wood, L. M., 8 Grassy Downs Place, Hamilton.2001
ZL1AFQ	Rosan, D. A. R., P.O.Box 65147, Mairangi Bay, Auckland.1330
ZL1AFR	McCartney, B. J., 32 Gallileo Street, Ngaruawahia.2171
ZL1AFS	Cowley, T. C. M., 850 Beach Road, Waiake, Auckland.1310
ZL1AFT	Walker, K., 66 Willoughby Avenue, Howick, Auckland.1705
ZL1AFU	Murphy, R. J., 19 Litten Road, Howick, Auckland.1705
ZL1AFV	Boyce, A. R., 26 Shakespeare Street, Cambridge.2351
ZL1AFY	Haydon, A. E., 10 Ngapipi Road, Orakei, Auckland.1105
ZL1AFZ	McLean, J. P., Newman Schoolhouse, Eketahuna.5991
ZL1AGA	Rasmussen, J. W., 65 Smith Street, Matamata.2271
ZL1AGB	Rorke, D., 14 Dysart Road, Tauranga.3001
ZL1AGC	Passau, K. M., 10 Tironui Road, Papakura.1703
ZL1AGD	Millar, I. G. S., 24 Entrician Avenue, Remuera, Auckland.1105
ZL1AGF	Morris, N. C., Unit 3, 659 Mt. Albert Road, Royal Oak, Auckland.1003
ZL1AGG	Jarman, J. E., Morgans Road, R.D. 2, Matamata.2271
ZL1AGH	Murphy, A. J., 33 Carey Street, Maeroa, Hamilton.2001
ZL1AGI	Gardener, R. S., 44 Masters Avenue, Hillcrest, Hamilton.2001
ZL1AGJ	Hobbis, E. A., 15 Wickham Place, Tauranga.3001
ZL1AGK	Clarke, B. T., Blackwell Drive, R.D.1, Tryphena, Great Barrier Island.1470
ZL1AGL	Fischer, H. G., 98 Gillies Avenue, Epsom, Auckland.1003
ZL1AGM	Sloane, J. P., 14 Whiteacres Drive, Pakuranga, Auckland.1706
ZL1AGN	Campbell, M. H., Fencourt Road, R.D. 1, Cambridge.2351
ZL1AGO	Williams, I. R., 144 Titirangi Road, New Lynn, Auckland.1207
ZL1AGP	Horwood, H., 233 King Street, Whakatane.3400
ZL1AGQ	Zimmermann, E. M., 48 Kitchener Road, Milford, Auckland., P.O.Box 31 261, Milford, Auckland.1309
ZL1AGR	Cotton, J. K., 24b Bucklands Beach Road, Bucklands Beach, Auckland.1704
ZL1AGS	Collins, P. E., 185 Victoria Street, Cambridge.2351
ZL1AGT	Taylor, E. R., 15 Wickham Place, Tauranga.3001
ZL1AGU	Sterling, I. H., 27 Cromwell Street, Mt. Eden, Auckland.1003
ZL1AGV	Dixon, L. N., 18 Koru Street, Mangere Bridge.1701
ZL1AGW	McDonald, D. F., Margaret Place, Ha Hei, R.D. 1, Whitianga.2856
ZL1AGX	Clark, A. T., 18 Saint Vincents Avenue, Remuera, Auckland.1105
ZL1AGY	Easton, J. A., R.D. 9, Wheki Valley Hill, Whangarei.0101
ZL1AGZ	Delaney, J. D., 41 Birdwood Road, Swanson, Auckland.1208
ZL1AHA	Boyd, J. M., 30a Mohoe Street, Rotorua.3201
ZL1AHC	Grayston, G. H., 34 Mangapiko Street, Te Awamutu.2400
ZL1AHD	Franklin, M. J., 52 Northboro Road, Takapuna, Auckland.1309
ZL1AHE	Morrison, K., 38 Edward Avenue, Orewa.1461
ZL1AHH	Simmonds, K. R., 41 Porritt Avenue, Birkenhead, Auckland.1310
ZL1AHI	Randerson, K. D., 12 Montgomery Avenue, Onerahi, Whangarei.0101
ZL1AHJ	Anderson, A. P., 421 Pukehangi Road, Rotorua.3201
ZL1AHK	Tester, W., 48 Pulham Road, Warkworth.1492
ZL1AHL	McLellan, G. L., 1 Icarus Place, Rotorua.3201
ZL1AHM	Bell, A. D., Main Road, Waimana.3474
ZL1AHN	Milford, R. T., Wendywood Lane, Kerikeri.0452
ZL1AHO	Sykes, R. J., 3/286 Rosebank Road, Avondale, Auckland.1207
ZL1AHP	Greendale, L. S., 47 Ramelton Road, Mt Roskill, Auckland.1004
ZL1AHQ	Field, G. H., 11 Featon Road, Waihi, Thames Valley.2991
ZL1AHR	Nolan, J. I., 3 Dairy Road, East Tamaki.1701
ZL1AHS	Turnwald, T. F., 63 Beach Road, Castor Bay, Auckland.1309
ZL1AHT	Buckland, I. D., 231b Titirangi Road, Titirangi, Auckland.1207
ZL1AHU	Seakins, P. J., 99 Exmouth Road, Northcote, Auckland.1309
ZL1AHV	Adams, W., 2 Sutton Close, Puriri Park Road, Whangarei.0101
ZL1AHW	Hoban, R. P., Waikeria Road, No. 4 R.D., Te Awamutu.2400
ZL1AHX	King, A. M., 36 Flaxdale Street, Birkdale, Auckland.1310
ZL1AHY	Wallace, D. W., 68 Aotea Crescent, Tokoroa.2392
ZL1AHZ	Kidd, B. F., P.O. Box 51-586, Pakuranga, Auckland.1730
ZL1AIA	White, C. M., No. 1 R.D., Tokoroa.2392

ZL1AIC	Dewar, D., 6 Syntax Place, Conifer Grove, Takanini.1702
ZL1AID	Leng, W. K., 36 Great South Road, Papatoetoe.1701
ZL1AIF	Reid, D. M., Te Kooti Road, R.D. 5, Kutarere.3471
ZL1AIG	Falkner, G. R., 65 Turanga Road, Henderson, Auckland.1208
ZL1AIH	McCormack, R. K. F., Vivian Bay, Kawau Island.1490
ZL1AII	McFarlane, I. R., 18 Huntly West Road, Ngaruawahia.2171
ZL1AIJ	Blake, C. B., Blackwell Drive, Tryphena, Great Barrier Island.1470
ZL1AIK	Lewis, P. J., c/- 178a Kimbolt on Road, Feilding, Manawatu.5600
ZL1AIL	Christie, W. E., 24 Bryce Avenue, Mt. Roskill, Auckland.1004
ZL1AIM	Kebble, S. W., 43 Smiths Road, Matua, Tauranga.3001
ZL1AIN	Frazerhurst, T. L., 81 East Street, Hamilton.2001
ZL1AIO	Rimmer, E.M.(Mrs), 28 Douglas Street, Whakatane.3400
ZL1AIP	Parker, T. H., 202 Albert Street, Thames.2801
ZL1AIQ	Veale, G. A., 31 Rangitoto Avenue, Remuera, Auckland.1105
ZL1AIR	Armstrong, B. E., Main Road, Mill Bay, R.D. 3, Mangonui.0557
ZL1AIS	Dyer, R. J., 16 Blundell Avenue, Kawerau.3452
ZL1AIT	Haggo, J. M. K., 3 Horne Street, Hamilton.2001
ZL1AIU	Eastern Bay of Plenty Branch NZART (Inc.), see Branch Directory
ZL1AIV	Tilsley, D. G., 4 Littlejohn Street, Mt Roskill, Auckland.1004
ZL1AIX	Robinson, W. J., "Ahuareka", Whitford-Maraeti Road, R.D. 1, Howick.1731
ZL1AIZ	Lake, P. B., 12 Brasenose Place, Tawa, Wellington.6203
ZL1AJA	Jones, J. J. (Mrs), 213 Whitney Street, Blockhouse Bay, Auckland.1207
ZL1AJC	Boyle, D. H. K., Main South Road, Otorohanga.2554
ZL1AJD	Krippner, F. J., Te Rore, R.D. No. 6, Te Awamutu.2400
ZL1AJE	Ansell, M. E., 32 Routley Drive, Glen Eden, Auckland.1207
ZL1AJF	Krippner, J. A., Te Rore, R.D. No. 6, Te Awamutu.2400
ZL1AJH	Davies, J. W. (Dr), 1 Birkley Road, Bayswater, Auckland.1309
ZL1AJI	Jeffries, A. W., 70 Woodglen Road, Glen Eden, Auckland.1207
ZL1AJJ	Craig, G. H., 12 Exploration Way, Whitby, Wellington.6253
ZL1AJK	Wood, W. B., 8 William Souter Street, Forrest Hill, Auckland.1310
ZL1AJL	Johnston, C. A. (Miss), 6 Syntax Place, Conifer Grove, Takanini.1702
ZL1AJM	Bloxham, W. J., 14 Hatton Road, Orewa.1461
ZL1AJN	Holmes, W. S., R.D. 1, Waiuku.1852
ZL1AJO	Jones, D. A., Lot 1086, Pauanui, Ocean Beach.2850
ZL1AJP	Willcocks, R. J., 181 Corks Road, Whangarei.0101
ZL1AJQ	Hogan, A. H., P.O.Box 1497, Taupo.3300
ZL1AJR	Chapman, R., 50 Rukutai Street, Mission Bay, Auckland.1105
ZL1AJS	Barker, J. A., 24b Pigeon Mountain Road, Bucklands Beach.1704
ZL1AJU	Barnard, B. F., 91 Melanesia Road, Kohimarama, Auckland., P.O. Box 25-197, St Heliers, Auckland.1130
ZL1AJV	Irving, P. J., 4 Scott Avenue, Mangere Bridge, Auckland.1701
ZL1AJW	Grant, R. C., 15 Scott Road, Stanmore Bay, Whangaparaoa.1463
ZL1AJX	Cox, J. B., 2/25 Pah Road, Epsom, Auckland.1003
ZL1AJY	Barratt, M. P., 6 Brussells Place, Birkenhead, Auckland.1310
ZL1AJZ	Stewart, R. N., 152 Cliff View Drive, Green Bay, Auckland.1207
ZL1AKA	Harris, J. W., 79 Stillwater Crescent, R.D. 3, Silverdale.1462
ZL1AKB	Gillard, M. L. N., 22 Stewart Street, Whakatane.3400
ZL1AKC	Crooke, B. W., 4 Kelly Street, Rotorua.3201
ZL1AKD	Clay, W. V., c/- R Lamber, 7 Wilson Avenue, Whangarei.0101
ZL1AKE	Exeter, M. N. L., 5 Dolphin Street, Pakuranga.1706
ZL1AKF	Miller, F. W., 17 Harris Street, Te Puke.3071
ZL1AKG	Quinn, P. T. M., 9 Page Place, Hillcrest, Hamilton.2001
ZL1AKH	Paterson, W., 329a Oceanbeach Road, Mt Maunganui, P.O. Box 4160, Mt Maunganui.3030
ZL1AKI	Tait, C. V., 11 Ridge Road, Tairua.2853
ZL1AKJ	Studholme, D. L., 22 Anita Avenue, Mt Roskill, Auckland.1004
ZL1AKK	Ellison, C. L., 32 Mahoe Street, Te Awamutu.2400
ZL1AKL	Eagle, E. H., 35 Argyll Road, Greerton, Tauranga.3001
ZL1AKM	McLean, P. A., C/- N. Crook, 691a East Coast Road, Browns Bay, Auckland.1310
ZL1AKN	Fairest, T. R., Tapuwae Road, Poratarao, R.D. 7, Te Kuiti.2500
ZL1AKO	Otto, R. H., State Highway 10, Waipapa, R.D.2, KeriKeri.0450
ZL1AKP	Doar, S. W., 40 Corks Road, Whangarei.0101
ZL1AKQ	Brant, A. E., 48 Wintere Road, Papatoetoe.1701
ZL1AKS	Wigley, J. N., 43 Ocean View Road, Northcote, Auckland.1309
ZL1AKT	Follett, M. S., 39 Edmund Road, Rotorua.3201
ZL1AKU	O'Donoghue, D. J., 22 Stanley Avenue, Milford, Auckland.1309
ZL1AKV	Bell, D. C., 19 Advene Road, Howick.1705
ZL1AKW	Horne, D. W. J., 3 Vine Avenue, Maungatapu, Tauranga.3001
ZL1AKX	Passau, M. B., Awanui Rise, P.O. Box 628, Papakura.1733
ZL1AKY	Reed, G. S., 510 Great South Road, Papakura, Auckland.1703
ZL1AKZ	Landor, P. M., East Otara Road, Opotiki.3472
ZL1ALA	Halden, J. E., Bush Road, R.D. 2, Ngatea.2852
ZL1ALB	Allen, D. G., 2/241 Penrose Road, Mt. Wellington, Auckland.1105
ZL1ALC	Barea, H., 15 Darley Street, Hamilton.2001
ZL1ALD	Smith, D. W., 110 Douglas Street, Whakatane.3400
ZL1ALE	Johnston, A. B. (Mrs), 63 Red Hill, Papakura.1703
ZL1ALF	Gibbs, P. N., 6 Hinau Place, Matamata.2271
ZL1ALG	Osborne, G. J., 34 Cobham Drive, Kawerau.3452
ZL1ALH	Lochmann, I. G., Nui Oat Barracks, Fort Dorset, Seatoun, Wellington.6030
ZL1ALJ	Fraser, T. J., Owaikura Road, R.D.3, Otorohanga.2554
ZL1ALK	Reed, C. M. (Mrs), 510 Great South Road, Papakura.1703
ZL1ALL	Young, W. G., 3 Kempthorne Crescent, Kohimarama, Auckland.1105
ZL1ALM	Mutch, J. T., 11 Goulstone Road, Whakatane.3400
ZL1ALN	Duncan, K. G., 2 Marsh Avenue, Milford, Auckland.1309
ZL1ALO	Giles, P. M., 11a Ozich Avenue, Te Atatu South, Auckland.1208
ZL1ALP	Harding, F. W., 16 Vonnell Place, Glenfield, Auckland.1310
ZL1ALQ	Deverick, E. I., 3 Toi Toi Place, Northcote, Auckland.1309
ZL1ALR	Kay, S. R., 1a Burwood Crescent, Remuera, Auckland.1105
ZL1ALS	Wylde, J. E., 11 Wai-iti Terrace, Whitianga.2856
ZL1ALT	Bowyer, J. V. M., 586 River Road, Fairfield, Hamilton.2001
ZL1ALU	Brott, R. O., Church Road, R.D. 2, Kaitaia.0500
ZL1ALV	Ussher, R. R., 4 Wychwood Crescent, Rotorua.3201
ZL1ALW	Williamson, J. G., 70 Ngataringa Road, Devonport, Auckland.1309
ZL1ALX	Gubb, G. K., 15a Omana Road, Papatoetoe.1701
ZL1ALZ	Luke, A. R., 16 Trentham Road, Papakura.1703
ZL1AMB	Milne, M. B., Fahey Road, R.D., Bombay.1750
ZL1AMC	Zwies, O. H., 232 King Street, Invercargill.9501
ZL1AMD	Loretz, R. K., 169 Dominion Road, Mt Eden, Auckland.1003
ZL1AME	Crook, F. G., 12 Ascot Avenue, Devonport, Auckland.1309
ZL1AMF	Gosling, K. F., 2/18 Buckley Road, Three Kings, Auckland.1003
ZL1AMG	Kirby, E. G., 32b Park Street, Tauranga.3001
ZL1AMH	Hughes, J. S. P., 256 Glamorgan Drive, Torbay, Auckland.1310
ZL1AMI	Jamieson, R. A., Oropi Road, R.D. 3, Tauranga.3021
ZL1AMJ	Saunders, J. R., 68 Lynbrooke Avenue, Avondale, Auckland.1207
ZL1AMK	Jensen, E. W., 166 Godley Road, Titirangi, Auckland.1207
ZL1AML	Lawrence, L. J., 28 McCullough Avenue, Mt. Roskill, Auckland. (Portable).1004
ZL1AMM	Murphy, R. E., 5 Flaxwood Lane, Opawa, Christchurch.8002
ZL1AMN	Johnston, D. A., 63 Red Hill, Papakura, Auckland.1703
ZL1AMO	Wright, R. W., 28 Chorley Avenue, Massey, Auckland.1208
ZL1AMQ	Male, F. G., 67 Waipuna Road, Mt. Wellington, Auckland.1106
ZL1AMR	Lindsay, I. M., 1/131 Botany Road, Howick, Auckland.1705
ZL1AMS	Bouwknegt, H. G., 36b Nelson Street, Blenheim.7301
ZL1AMT	Moore, D. A., 49a Whittaker Road, Warkworth, North Auckland.1492
ZL1AMU	Jury, R. B., 55 Willerton Avenue, New Lynn, Auckland.1207
ZL1AMW	Wallace, A. J., 20 Lorne Street, Hamilton.2001
ZL1AMX	Daniel, G. G. (Mrs), Whangaumu Street, R.D. 3, Whangarei.0121
ZL1AMY	Fletcher, I. G., 248 East Coast Road, Takapuna North, Auckland.1309
ZL1AMZ	Glendenning, T., 75 Cardiff Road, Pakuranga.1706
ZL1ANA	Barker, J. R. (Mrs), 26 Lyndhurst Street, Te Atatu South, Auckland.1208
ZL1ANB	Ball, C. A., 59 Ferguson Street, Manurewa.1702
ZL1AND	Turner, A. B., 7 Acmena Lane, Pakuranga, Auckland.1706
ZL1ANE	Gingles, J. C., Te Maika Road, Ngunguru, R.D. 3, Whangarei.0250
ZL1ANF	Beale, W. M., 12 Emerson Street, Te Aroha.2971
ZL1ANG	Frazerhurst, L. F., 81 East Street, Hamilton.2001
ZL1ANH	Hunt, G. K., 30 Grande Vue Road, Kawaha Point, Rotorua.3201

ZL1ANI	Bell, K. A., 62b Eden Terrace, Kamo, Whangarei.0101
ZL1ANJ	Ellis, J. M., 3 Hawera Road, Kohimarama, Auckland.1105
ZL1ANK	Daniel, J. E., Whangaumu Street, R.D. 3, Whangarei.0121
ZL1ANL	Smith, I. G., 20 Kirk Street, Whakatane.3400
ZL1ANM	Barnett, N. M., 29 Terra Nova Street, Glen Eden, Auckland.1207
ZL1ANN	Tricker, D. A. G., 100 Whangaparaoa Road, Orewa.1461
ZL1ANO	Matsui, Y., 29 Balmoral Road, Epsom, Auckland.1003
ZL1ANP	Parsons, N. L. (Mrs), 509/1 Mutu Street, Te Awamutu.2400
ZL1ANQ	Herdman, R. J., 5 Sullivan Street, Whakatane.3400
ZL1ANR	Gibbins, E. G., 114 Third View Avenue, Bucklands Beach.1705
ZL1ANT	Parr, J. E., 42 Parlane Street, Addington, Christchurch.8002
ZL1ANU	Tutton, M. L., 219 Panama Road, Otahuhu, Auckland.1106
ZL1ANV	Creed, R. M., 38 Hollywood Avenue, Titirangi, Auckland.1207
ZL1ANW	Dixon, A. W., 4/54 Gowing Drive, Meadowbank, Auckland.1105
ZL1ANX	Reid, A. A., 62a Puke Road, Paeroa.2951
ZL1ANY	Pearce, S. G., 50 Evans Street, Dunedin.9001
ZL1AOA	Whitney, J. R., 4 Dawson Street, Hamilton.2001
ZL1AOB	Harrop, G. N., 8 Waingaro Road, Ngaruawahia.2171
ZL1AOC	Henderson, H. R. T., 11 Chesley Place, Bucklands Beach, Auckland.1704
ZL1AOD	Byrnes, C. D., 31 Rosehill Drive, Papakura.1703
ZL1AOE	Gillgren, S. J., 30 Hall Street, Kihikihi.2400
ZL1AOF	King, J. L., 26 Pouwhare Street, Whakatane.3400
ZL1AOG	Hastings, W. W., 35 Dundas Road, Whangarei.0101
ZL1AOH	Stewart, M. I., 4 Page Place, Hamilton.2001
ZL1AOI	Trethowen, V. G., 45 Warwick Avenue, Westmere, Auckland.1002
ZL1AOJ	Robinson, J. R., 24a McKay Drive, Temple View, Private Bag 5, Frankton.2031
ZL1AOK	Handisides, W. S., 117 East Coast Road, Milford, Auckland.1309
ZL1AOL	Shacklock, F. W., 84 Motatau Road, Papatoetoe.1701
ZL1AOM	Brown, M. W., 290 Douglas Avenue, Te Awamutu.2400
ZL1AON	Edginton, K. S., 69 East Street, Hamilton.2001
ZL1AOO	Holley, W., 16 Ashlynne Avenue, Papatoetoe, Auckland.1701
ZL1AOP	Frewin, H. G., 42 Walmsley Road, Waihi.2991
ZL1AOQ	Upsdell, D. M., 2 Wilmington Place, Forrest Hill, Auckland.1310
ZL1AOS	Austin, P. H., 63 Elliston Crescent, Stanmore Bay, Whangaparaoa.1463
ZL1AOT	Margison, I., 3/28 Towai Street, St. Heliers, Auckland.1105
ZL1AOU	Southen, H. J., State Highway 2, Te Puna R.D. 2, Tauranga.3030
ZL1AOV	Matheson, J. L., Mata Road, R.D.1, Kohukohu.0471
ZL1AOW	Frankham, D. W., 18 Sabulite Road, Glen Eden, Auckland.1207
ZL1AOX	Ashley, I. T., 5 Willoughby Avenue, Howick.1705
ZL1AOY	Young, I., 15 Glenfell Road, Mount Eden, Auckland.1003
ZL1AOZ	Mackay, W. J., 49 Gladstone Road, Parnell, Auckland.1001
ZL1APA	Hardy, R., 86 Mountain Road, Henderson, Auckland.1208
ZL1APB	McDonald, R. W., 100 Kauri Road, Whenuapai.1450
ZL1APC	Chaytor, J. M., 39b Tamihana Street, Matamata.2271
ZL1APE	Corbett, A. B. S., 10 Roseberry Avenue, Birkenhead, Auckland.1310
ZL1APF	Bateman, T. L., 109 Lambert Street, Thames.2801
ZL1APG	Perston, K. J., 37 Grey Street, Kawerau.3452
ZL1APH	Dittmer, C. R., 31 George Street, Morrinsville.2251
ZL1API	Hendrie, J. G., Omauna Road, Kaeo.0556
ZL1APJ	Jessen, R., 156 Tamamutu Street, Taupo.3300
ZL1APK	Turvey, G. R., 89 Homedale Street, Rotorua.3201
ZL1APL	Tague, T. F. E., Unit 2, 15 Birdwood Crescent, Parnell, Auckland.1001
ZL1APM	Bowers, J., 104 Hinemoa Avenue, Taupo.3300
ZL1APO	Penney, G. A., 6 Meadow Drive, Whitianga.2856
ZL1APP	Haysmith, C. A., Kaukapakapa, R.D.1, Helensville.1451
ZL1APQ	Crook, N. W. W. G., 691a East Coast Road, Browns Bay, Auckland.1310
ZL1APR	Rosborough, J. L., Hills Road, R.D. 1, Raglan.2051
ZL1APS	Browne, N. H., 23 Te Puia Street, Kamo, Whangarei.0101
ZL1APT	Jones, E. B., c/- New Zealand Foundation for the Blind, 545 Parnell Road, Auckland.1001
ZL1APU	Sowerby, B. W., 42 Cheriton Road, Howick.1705
ZL1APV	Fisher, J. R., 35 Shoreham Street, Blockhouse Bay, Auckland.1207
ZL1APW	Marx, A. S., 43 Island View Road, Rotorua.3201
ZL1APX	Duncan, S., 208 Ohaupo Road, Glenview, Hamilton.2001
ZL1APY	Harris, L. M., Saies, Totara North.0550
ZL1APZ	Franks, R. A., Scotsmans Valley Road, R.D. 1, Morrinsville., P.O. Box 11-022, Hamilton.2251
ZL1AQA	Hood, W. F., 31 Stanley Street, Matamata.2271
ZL1AQB	Howe, A. M., 5 Philip Street, Papatoetoe.1701
ZL1AQC	Sinclair, V. A., 37b Beatrice Avenue, Hillcrest, Auckland.1310
ZL1AQD	Crossman, V. T., 38 Milton Road, Otumoetai, Tauranga.3001
ZL1AQE	Wright, D. P., 3 Tamatea Drive, Snells Beach, Warkworth.1490
ZL1AQF	Malcomson, M. R. J., 409 Frazer Street, Tauranga.3001
ZL1AQJ	Wrigley, J. S., 5 Derwent Street, Western Springs, Auckland.1002
ZL1AQK	Brown, C. D., 112 Beach Road, Onerahi, Whangarei.0101
ZL1AQL	Hinstridge, M. F., 15a Cranbrook Place, Glendowie, Auckland.1105
ZL1AQM	Kendall, J. D., 16 Ferguson Avenue, Greenlane, Auckland.1105
ZL1AQO	Gee, I. A. (Ivan), 5 Rhodes Avenue, Mt. Albert, Auckland.1003
ZL1AQQ	Shepherd, G. W., 60 Chivalry Road, Glenfield, Auckland.1310
ZL1AQR	Tokoroa Branch NZART (Inc), see Branch Directory
ZL1AQS	Sexton, J. E., Paparimu, R.D. 3, Papakura.1733
ZL1AQT	Smith, A. G., 17 Raniera Place, Rotorua.3201
ZL1AQU	Boyer, C., 311 Pakuranga Road, Pakuranga.1706
ZL1AQV	Barclay, S. N., 185 White Swan Road, Mt Roskill, Auckland.1004
ZL1AQX	Toomey, A. H., 38 Bradbury Road, Howick.1705
ZL1AQY	Knaggs, G. R., 31 Henderson Crescent, Tauranga.3001
ZL1ARA	MacDonald, A. D., 82 Dinsdale Road, Hamilton.2001
ZL1ARB	Smith, P. L., 56 Hobsonville Road, West Harbour, Auckland., P.O. Box 73-073, Auckland International Airport.1730
ZL1ARC	McKenzie, C. J. C., 4 Brylee Drive, Takanini.1702
ZL1ARD	Duncan, L. E., 14 Cowley Drive, Temple View, Hamilton.2001
ZL1ARE	Liefting, E. M., Taylors Road, R.D. 3, Kaitaia.0500
ZL1ARF	Wallis, B. S., 9 Verran Road, Birkenhead, Auckland.1310
ZL1ARG	Millar, R. W. K., Mullet Point, R.D. No. 2, Warkworth.1492
ZL1ARH	Rowe, P. R., 220 Balmoral Drive, Tokoroa.2392
ZL1ARJ	Wadey, A. P., Karaka Road, Parakao, Whangarei.0250
ZL1ARL	Neno, M. R., 226 Dickson Road, Papamoa, R.D. 7, Te Puke.3071
ZL1ARM	Matthews, J. C. H., 1 Mayfair Crescent, Mairangi Bay, Auckland.1310
ZL1ARN	Brown, J. T., 32 English Street, Hamilton.2001
ZL1ARQ	Dunhill, I. H., 19 Goring Road, Mt. Albert, Auckland.1003
ZL1ARR	Russell, A. M., 4 Milich Terrace, Te Atatu, Auckland.1208
ZL1ART	Allen, A. W., Main Road, R.D.1, Broadwood, Northland.0553
ZL1ARU	Langridge, E. R., 56 Somerset Road, Mt. Roskill, Auckland.1004
ZL1ARW	Forsyth, J. T., 7 Ridgemount Rise, Mangere Bridge, Auckland.1730
ZL1ARX	Wright, P. W. J., 36 Bell Street, Kawerau.3452
ZL1ARY	Chandler, R. W., 36 Eastern Beach Road, Bucklands Beach.1704
ZL1ARZ	Gibbs, F. I., 22 Fairview Place, Te Puke.3071
ZL1ASA	George, R. F., 68 Cliff Road, Torbay, Auckland.1310
ZL1ASB	Blake, J. J., 32 Kiwi Road, Point Chevalier, Auckland.1002
ZL1ASC	McCann, C. S., 45a Braemar Road, Rothesay Bay, Auckland.1310
ZL1ASD	Bayley, E., 11 Trimmer Terrace, Papatoetoe.1701
ZL1ASE	Highley, F. K., 12 Hurley Place, Cambridge.2351
ZL1ASF	Parkinson, D. A. J., 22 Hiwihau Place, Glenfield, Auckland.1310
ZL1ASG	Sanderson, J. B., 25 Raurimu Avenue, Onerahi, Whangarei.0101
ZL1ASH	Williamson, O. G., 11 Keddell Street, Frankton.2001
ZL1ASL	Rimmer, K. S., 61 Awatapu Drive, Whakatane.3400
ZL1ASM	Kenealy, R .D., 119 Kihikihi Road, Te Awamutu.2400
ZL1ASN	Adams, R. E. V., 21 Ashby Avenue, St Heliers, Auckland.1105
ZL1ASO	Grayson, R. I., P.O.Box 517, Papakura.1733
ZL1ASP	Abbott, R. F., 65 Kaimanawa Street, Taupo.3300
ZL1ASR	Hartnell, G. W., P.O. Box 41, Manurewa.1732
ZL1ASU	Little, D. C., 25 Marellen Drive, Red Beach, Orewa.1461
ZL1ASV	Phillips, R. L., 27a Seaview Road, Milford, Auckland.1309
ZL1ASW	Cambridge Amateur Radio Club, see Branch Directory
ZL1ASX	Leeman, G., 76 Stillwater Crescent, R.D. 3, Stillwater.7850
ZL1ASZ	Anderson, A. N., 3 McKenzie Road, Mangere Bridge, Auckland South.1701
ZL1ATB	Leitch, D. A., 40 Alford Street, Waterview, Auckland.1207
ZL1ATD	Marsden, J. R. G., 56 Kimpton Road, Papatoetoe.1701
ZL1ATE	Babich, A. T., 48 Citrus Avenue, Waihi Beach.2990
ZL1ATF	Sainsbury, D. G., Tanners Point, R.D. 1, Katikati.3051

ZL1ATG	Geddes, G. D. S., Reinga Road, Kerikeri.0452
ZL1ATI	Ward, C. J., 30 Eskdale Road, Birkdale, Auckland.1310
ZL1ATJ	Cowell, R. E., 7 Sunrise Lane, Te Atatu South, Auckland.1208
ZL1ATK	Millar, T. R. C., 25 Moana Crescent, P.O. Box 34, Mangakino.2391
ZL1ATL	Park, R. J., 205 Hape Road, Thames.2801
ZL1ATM	Barrett, N., 42b Scott Avenue, Mangere Bridge, Auckland.1701
ZL1ATO	Taumarunui Branch NZART (Inc.), see Branch Directory
ZL1ATQ	Salter, R. T., Brind Road, Russell.0293
ZL1ATR	Witheford, P. S., 97b Otaika Road, Otaika, Whangarei.0101
ZL1ATS	Hoyle, R. P., 3 Hobson Street, Waihi.2991
ZL1ATT	Louisson, G. M., 2 Oakley Avenue, Hamilton.2001
ZL1ATU	Hayhurst, K. W., 204 Mill Street, Thames.2801
ZL1ATV	Robertson, N. L., 23 Tauhara Street, Green Bay, Auckland.1207
ZL1ATW	Meenagh, M. B., 223 Te Tomo Street, Te Awamutu.2400
ZL1ATX	Vogel, H., 20 Harapaki Road, Meadowbank, Auckland.1105
ZL1ATY	O'Keefe, J. F., 511 Scenic Drive, R.D. 1, Auckland.1732
ZL1ATZ	Jepson, L. J., 224 Marsden Point Road, Ruakaka.0253
ZL1AUA	Wilson, B. E., 10a Jaemont Avenue, Te Atatu South, Auckland.1208
ZL1AUB	Watkins, G. A., 1/18 Rosehill Drive, Papakura.1703
ZL1AUC	Langridge, R. A., 16 Jellicoe Street, Whangarei.0101
ZL1AUD	Diamond, C. S., R.D., Rawene, Hokianga.0473
ZL1AUF	O'Hagen, M. G., 61 Maxwell Road, Blenheim.7301
ZL1AUG	Street, G. H., 4 Emory Drive, Takanini, Auckland.1702
ZL1AUH	Murray, N. V., Te Toro, R.D. No. 4, Waiuku.1852
ZL1AUI	Banks, R. S., Taupo Bay, R.D., Mangonui.0557
ZL1AUJ	Warman, R. W., Hospital Road, Te Kopuru.0356
ZL1AUK	Hill, M. J., 119 Sutherland Road, Otumoetai, Tauranga.3001
ZL1AUL	Thomas, R. D., c/- Homestead Hotel, Keri Keri.0452
ZL1AUM	Maddock, C. N., 75a Methuen Road, Avondale, Auckland.1207
ZL1AUN	Inder, A. M. (Mrs), 19 Rushton Street, Otumoetai, Tauranga.3001
ZL1AUO	Forrester, T., 254 Stokes Valley Road, Stokes Valley.6306
ZL1AUP	Bacchus, B. P., 514 Fitzroy Avenue, Hastings.4201
ZL1AUQ	Pople, D. A. O., 19 Kingdale Road, Henderson, Auckland.1208
ZL1AUS	Insley, J. F., 1 Tudor Rise, Whakatane.3400
ZL1AUU	White, J. H. S., Unit 6, 97 Coronation Road, Papatoetoe, Auckland.1701
ZL1AUV	Sanders, J. G., Greenslade Road, Raglan.2051
ZL1AUW	Wooler, A. M., 40 Powrie Street, Glenfield, Auckland.1310
ZL1AUX	Greaves, G. J., 40 Windoma Circle, Papatoetoe, Auckland.1701
ZL1AUY	Burkinshaw, D. E., 30 Tiroroa Avenue, Te Atatu South, Auckland.1208
ZL1AVA	Haag, W. K., 29 Ferguson Avenue, One Tree Hill, Auckland.1105
ZL1AVB	Miller, S. P., Flat 2, 156 Manuka Road, Glenfield, Auckland.1310
ZL1AVC	Bretherton, E. C., 24 Iles Road, Rotorua.3201
ZL1AVD	Bell, D. G., 48 Dundee Place, Blockhouse Bay, Auckland.1207
ZL1AVE	Atchinson, D. R., 783 Great South Road, Papatoetoe.1701
ZL1AVH	Alder, S. H., 195 St Heliers Bay Road, St Heliers, Auckland.1105
ZL1AVI	Kyle, B. V., 76 St. Andrews Road, Epsom, Auckland.1003
ZL1AVJ	Harper, M. J., 34 Tuatara Drive, Kamo.0101
ZL1AVK	Ruffell, W. L., 8 St. Aubyn Street, Devonport, Auckland.1309
ZL1AVL	Manning, A. J., 7 Churchill Street, Putaruru.2371
ZL1AVM	Means, C. B., 22 Miles Crescent, Newlands, Wellington.6004
ZL1AVN	McElwain, B. R., 12 Vine Street, Hamilton.2001
ZL1AVO	Robertson, K. S., 2 Jaemont Avenue, Te Atatu South, Auckland.1208
ZL1AVP	Tweedie, L. E., 5 Quebec Road, Forrest Hill, Auckland.1309
ZL1AVQ	Auckland University Radio Club, (Trustee: ZL1AN), 32 Princes Street, Auckland.1001
ZL1AVR	Rowe, J. P., 24 Okareka Place, Pakuranga, Auckland.1706
ZL1AVS	Burge, A. W., 14 Dennis Avenue, Manurewa.1702
ZL1AVU	Garlick, C. W., 4 James Place, Papakura.1703
ZL1AVV	McFayden, E. J., 39 Kahu Street, Rotorua.3201
ZL1AVW	Wing, B. E., 11 McMurdo Avenue, Melville, Hamilton.2001
ZL1AVX	Johnston, D. J., 25 Buckland Road, Epsom, Auckland.1003
ZL1AVY	Tennent, D. R., 107a New Windsor Road, Avondale, Auckland.1207
ZL1AVZ	Ryall, B. J., 195 Te Atatu Road, Te Atatu South, Auckland.1208
ZL1AWA	Voss, A., 28 Matipo Street, Taupo.3300
ZL1AWB	Ryan, R. V., 50 Surf Road, Stanmore Bay, Whangaparaoa.1463
ZL1AWD	Parsons, J. N., c/- V.L.Eade, Moody Street, Gore Bay, R.D.3, Cheviot.8271
ZL1AWE	Nicholson, A. J., 21 Egremont Street, Takapuna, Auckland.1309
ZL1AWF	Sexton, E. A., Paparimu, R.D.3, Papakura.1733
ZL1AWG	Palmer, H. W., 26 Hilton Road, Lynmore, Rotorua.3201
ZL1AWH	Sopp, C. E., Cable Bay, Block Road, R.D. 3, Kaitaia.0500
ZL1AWI	Bott, A. G., Woodstock Avenue, Mackaytown., P.O. Box 28, Karangahake, via Paeroa.2950
ZL1AWL	Brooks, D. S., C/- Post Office Claris, Great Barrier Island.1470
ZL1AWM	Rudkin-Whyte, L. V., 214 Otahu Road, Whangamata.2992
ZL1AWN	Erasmus, J. D., 7 Awatere Place, Snells Beach, Warkworth.1490
ZL1AWO	Pepperell, B. F., 17 Armagh Street, Hamilton.2001
ZL1AWP	Dennison, A. S., Heron Park Orchard, Levley Lane, Katikati.3051
ZL1AWQ	Johnson, P. R., 22 Huia Street, Rotorua.3201
ZL1AWR	Goodacre, H. W., Pickering Road, R.D. 3, Hamilton.2021
ZL1AWS	O'Connell, K. D., 97 Malfroy Road, Rotorua.3201
ZL1AWT	Everitt, A. B., 11 Luplau Crescent, Howick.1705
ZL1AWU	Rouse, C. A., 18a Ridge Road, Browns Bay, Auckland.1310
ZL1AWV	Ison, H. D. S., 133 Oak Tree Avenue, Browns Bay, Auckland.1310
ZL1AWW	Welford, G. H., 30 Churchill Avenue, Manurewa.1702
ZL1AWX	Jillings, M. A., 71 Hutchinson Road, Howick, Auckland.1705
ZL1AWZ	Leitch, T. G., 38 David Street, Morrinsville.2251
ZL1AXA	Burgess, G. W., 34 Booralee Avenue, Howick, Auckland.1705
ZL1AXB	Murdoch, P. J., 183 Glengarry Road, Glen Eden, Auckland.1207
ZL1AXC	Chapman, C. B., 35 Cosgrave Road, Papakura.1703
ZL1AXD	Melhuish, L. D., 110 Golf Road, Titirangi, Auckland.1207
ZL1AXE	Spackman, M. L.(Rev), The Vicarage, 20 Church Street, Devonport, Auckland.1309
ZL1AXF	McRae, E. D., 4 Nottingham Road, Onerahi, Whangarei.0101
ZL1AXG	Woods, M. H., 136a Coromandel Street, Newtown, Wellington.6002
ZL1AXH	Miller, E. D. N., see Overseas Members
ZL1AXI	Foote, J. R., Dip Road, Kamo.0101
ZL1AXJ	Waring, B. A., 57 Reelick Avenue, Pakuranga, Auckland.1706
ZL1AXK	Edgar, L. D., 11 Puriri Road, Whenuapai.1450
ZL1AXL	Roberts, B. L., 41 McFadzean Drive, Blockhouse Bay, Auckland.1207
ZL1AXM	Cook, K. J., 12 Centorian Drive, Mairangi Bay, Auckland.1310
ZL1AXN	Anderton, T. E., 87 Woolfield Road, Papatoetoe, Auckland.1701
ZL1AXO	Bareman, K., 17 Matipo Road, Te Atatu North, Auckland.1208
ZL1AXQ	Hardwick, D. B., R.D. 2, Matamata.2271
ZL1AXS	Griffin, P. J., 44 Waimari Road, Whenuapai Village, Auckland.1450
ZL1AXT	De Luca, B. C., 20 Gwilliam Place, Freemans Bay, Auckland.1001
ZL1AXU	Orchard, M. P., 1 The Heads, Whakatane.3400
ZL1AXV	Richardson, K. R., 4 Redcrest Avenue, Papakura, Auckland.1703
ZL1AXW	Shaw, M. Y., 238 Maunsell Road, Port Waikato.1890
ZL1AXX	Smith, R. I., Caton Road, R.D. 2, Waitakere, Auckland.1230
ZL1AXY	Hjorring, B. G., 48 Smythe Road, Henderson, Auckland.1208
ZL1AXZ	Sample, K. W., 46a Sunrise Avenue, Mt Maunganui.3002
ZL1AYA	D'Arcy, A. E., 2/41 East Coast Road, Milford, Auckland.1309
ZL1AYB	Bowkett, J. A., 19 School Road, Ngongotaha.3202
ZL1AYC	Shipman, N. J., 15 Masefield Street, Howick.1705
ZL1AYD	Thomson, J. D., 15a Milford Road, Milford, Auckland.1309
ZL1AYE	Midwinter, G. E. D., Otaika Valley Road, R.D. 10, Whangarei.0121
ZL1AYF	Price, D. A., 115 Upland Road, Remuera, Auckland.1105
ZL1AYG	Shepherd, J., 52 Wintere Road, Papatoetoe.1701
ZL1AYH	Wallace, A. D., c/- J.Wallace, 1346 Whangaparaoa Road, Whangaparaoa.1463
ZL1AYI	Harris, N. G., 402 Maungatapu Road, Tauranga.3001
ZL1AYJ	Jones, E., 104b Ravenwood Drive, Forrest Hill, Auckland.1310
ZL1AYL	Young, M. G., 15 Glenfell Road, Epsom, Auckland.1003
ZL1AYM	Tennant, C. H., 8 McLeod Street, Weymouth, Auckland.1701
ZL1AYN	Lowe, R. A., 43 Flower Street, Bulls.5452
ZL1AYO	Seaman, H. A., 86 Taylor Street, Blockhouse Bay, Auckland.1207

ZL1AYP	Pickles, D. S., 371 Pakuranga Road, Pakuranga.1706
ZL1AYQ	Maindonald, J. D., 17 McKenzie Road, Owhata, Rotorua.3201
ZL1AYS	Stewart, R. W., 232 Great South Road, Remuera, Auckland.1105
ZL1AYU	Thorley, A., C/- Caraliase Park, 1 Emerton Road, Waihi Beach South.2990
ZL1AYV	Dingley, M. J., 2139 Great North Road, Avondale, Auckland.1207
ZL1AYW	Speedy, S. L., 4a Windermere, 6 The Promenade, Takapuna, Auckland.1309
ZL1AYX	McLeod, M. N. A., 11 Rickards Place, New Lynn, Auckland.1207
ZL1AYY	Candy, F. A., 19a Claude Road, Manurewa, Auckland.1702
ZL1AYZ	Natzke, R. L., 281 Racecourse Road, P.O. Box 87, Te Awamutu.2400
ZL1AZA	Robertson, K. F., Unit 59, Hibiscus Coast Retirement Village, Red Beach, Auckland.1461
ZL1AZB	Young, R. D., 29a George Street, Te Kuiti, P.O. Box 57.2500
ZL1AZC	Wilson, G. E., 10 Wech Drive, Warkworth.1492
ZL1AZE	Miller, B. D., 67 Hornsey Road, Melrose, Wellington.6003
ZL1AZH	Pabbruwe, H. I., 99 Bradbury Road, Howick, Auckland.1705
ZL1AZI	Hirst, J. R., 1a Northboro Road, Takapuna, Auckland.1309
ZL1AZJ	Sutherland, S. F., Ruaroa Road, R.D. 1, Kaitaia.0500
ZL1AZK	Keucke, F. H., 31 Crestwood Village, 38 Golf Road, Titirangi, Auckland.1207
ZL1AZL	Greenhalgh, R. W., KieKie Road, Aria.2551
ZL1AZM	Addison, R. R., 14 Clifton Road, Whakatane.3400
ZL1AZP	Anderson, B. B., 2 Glenelg Road, Red Beach, Hibiscus Coast.1461
ZL1AZR	Rea, J. S.(Dr), 248 Kepa Road, Mission Bay, Auckland.1105
ZL1AZS	Christeson, E. L., 76 Highland Park Parade, Howick, Auckland.1705
ZL1AZT	Clare, I. K., Goodall Road, Whakamarama, R.D. 6, Tauranga.3021
ZL1AZU	Nelson, B. C., 59 Percy Street, Warkworth.1492
ZL1AZW	Liefting, A. M. M., Taylor Road, R.D. 3, Kaitaia.0500
ZL1AZX	Armstrong, J. B., P.O.Box 202, Opotiki.3472
ZL1AZY	Green, R. G., 9 Bruce Avenue, Hamilton.2001
ZL1AZZ	Darrall, P. G., 11 Irene Crescent, Goodleigh, Hamilton.2001
ZL1BAB	Cooper, W. G., 7 Hartfield Rise, Papakura.1703
ZL1BAC	Hilliar, S. W., 10 Rewhiti Avenue, Takapuna, Auckland.1309
ZL1BAD	Knowles, R. E., Main Road, Onewhero, R.D. 2, Tuakau.1892
ZL1BAE	Waihi Branch NZART (Inc), see Branch Directory
ZL1BAF	Woolf, H. L., 6 Rawhiti Road, Onehunga, Auckland.1106
ZL1BAG	McLennan, E. D., 18 Oxford Street, Tirau.2372
ZL1BAH	Waiuku College Amateur Radio Club, (Trustee: ZL1BMD), Waiuku College, Waiuku.1852
ZL1BAI	Trigg, L. E., Peria R.D. 3, Kaitaia.0500
ZL1BAJ	Candy, B. R., 19a Claude Road, Manurewa, Auckland.1702
ZL1BAK	Burrage, D. H., 11 Bannister Place, Avondale, Auckland.1207
ZL1BAL	Ball, T., Second Avenue, Waihou.2972
ZL1BAM	Milligan, J. W., 88 Tiraumea Drive, Pakuranga.1706
ZL1BAO	Martin, H. R., 26 Dundee Place, Blockhouse Bay, Auckland.1207
ZL1BAP	Parr, J. B., 9 Willow Way, Pakuranga, Auckland.1706
ZL1BAQ	Heaven, K. J., 46 Workers Road, Wellsford.1493
ZL1BAR	Martensen, J. E., 34 Lawrence Street, Herne Bay, Auckland.1002
ZL1BAS	Morgan, O. J., 1 Waitete Road, Waihi.2991
ZL1BAU	Bakulich, J. V. M., Mt. Wesley Road, Dargaville.0300
ZL1BAV	Vial, S. B., 159 Kowhai Road, Mairangi Bay, Auckland.1310
ZL1BAW	Coleman, R. E., 94 Darraghs Road, Tauranga.3001
ZL1BAX	Slaven, C. P., 19 Gilmore Street, Waihi.2991
ZL1BAY	Tarlton, B. M., 8 North Road, Kaitaia.0500
ZL1BAZ	Davis, S. R., 5 Knowles Crescent, Waihi.2991
ZL1BBA	Orchard, B. P., 40 Hinemoa Avenue, Taupo.3300
ZL1BBB	Scrivener, G. Y., 295 Ocean Beach Road, Mt. Maunganui.3002
ZL1BBC	Coleman, P. J., 11 Central Avenue, Whangarei.0101
ZL1BBD	Sowerby, J., 120a Tawa Street, Hamilton.2001
ZL1BBE	Innes, R. J., 3 Roland Hill, Glen Eden, Auckland.1207
ZL1BBF	Lusk, R. I. B., 130 Scenic Drive, Titirangi, Auckland.1207
ZL1BBH	Green, A. T., 98 Albert Street, Hamilton East.2001
ZL1BBJ	Ede, R. P. A., 68 Glamorgan Drive, Torbay, Auckland.1310
ZL1BBK	Allan, G. D., 194 Beach Road, Campbells Bay, Auckland.1310
ZL1BBL	Taylor, M. F. W., 49 Whakaipo Avenue, Taupo.3300
ZL1BBM	Ashton, H. G., 238 Rangatira Road, Birkenhead, Auckland.1310
ZL1BBN	Parr, W. R. (Mrs), 5 Charles Edward Street, Ohaupo.2452
ZL1BBO	Hayman, A. H., 29 Prospect Terrace, Milford, Auckland.1309
ZL1BBP	Peace, K. I., Whangapoua Beach, R.D., Coromandel.2851
ZL1BBQ	Maxwell, S. G., 26 Tuhaere Street, Orakei, Auckland.1105
ZL1BBR	Chamberlin, P. C., P.O. Box 131, Clevedon.1751
ZL1BBS	Kilpatrick, G., 157a Long Drive, St Heliers, Auckland.1105
ZL1BBT	Orchard, H. M., 40 Hinemoa Avenue, Taupo.3300
ZL1BBU	Medley, E. J., 10 Grosmont Terrace, Otumoetai, Tauranga.3001
ZL1BBW	Williams, K., Ody Road, Taurikura, R.D. 4, Whangarei.0250
ZL1BBX	Warriner, A. D., c/- Public Trust Office, P.O.Box 21 359, Henderson.1231
ZL1BBY	Brown, F. W. S., Unit 8, 221b Queen Street, Pukekohe.1800
ZL1BBZ	Holt, R., 10 Collingwood Road, Waiuku.1852
ZL1BCA	Batkin, B. W., Batkin Road, Hunua, R.D. 4, Papakura.1733
ZL1BCB	Hight, B. G., 59 Pomaria Road, Henderson, Auckland.1208
ZL1BCC	Crandall, S., Waihi Road, Paeroa.2951
ZL1BCE	Eckett, J. A. B., 23 Pinedale Place, Henderson, Auckland.1208
ZL1BCF	Williamson, D. E. J., R.D.9, Poroti, Whangarei.0121
ZL1BCH	Davis, B. C. B., 10 Willencote Place, Papakura, Auckland.1703
ZL1BCI	Sinclair, N. S., 29 Meadowland Street, Tauranga.3001
ZL1BCJ	Steel, R. E., c/- K.Steel, 399 Wai-iti Road, Timaru.8601
ZL1BCK	Kamat, G. Y., 3/14 Poronui Street, Auckland.1003
ZL1BCL	Lewis, V. A., 38b Burwood Road, Matamata.2271
ZL1BCN	Messent, A. J., Main Road, Murupara P.O. Box 23.3272
ZL1BCP	Peters, S. J., 43 Wilsher Crescent, Henderson, Auckland.1208
ZL1BCU	Boyd, B. F., 8 Wallis Street, Raglan.2051
ZL1BCV	White, J. W., 633b Kamo Road, Kamo, Whangarei.0101
ZL1BCW	Webber, H. C., 6 Brabant Street, Whakatane.3400
ZL1BCX	Fasher, N. C., 123 Peary Road, Mt Eden, Auckland.1003
ZL1BCY	McMillan, D. L., 371 Dey Street, Hamilton.2001
ZL1BCZ	Drummond, D. T., 5 Griffiths Place, Hamilton.2001
ZL1BDA	Wright, C. C., 3 Livingstone Street, Milford, Auckland.1309
ZL1BDB	Trevena, M. R., 1 Talga Court, Conifer Grove, Takanini.1702
ZL1BDC	Brown, N. G., 8 Tui Grove, Te Haumi, Paihia., P.O. Box 136, Paihia.0252
ZL1BDD	Bowman, M. J., 8 Morice Place, Torbay, Auckland.1310
ZL1BDE	Visser, P., 4 Kauri Crescent, Matamata.2271
ZL1BDF	Petherick, G. R., 84 Aroha Avenue, Morningside, Auckland.1003
ZL1BDG	Mogford, F. L., 74 Buchanan Street, Opotiki.3472
ZL1BDH	Latham, G. W., 5a Halberg Crescent, Whakatane.3400
ZL1BDI	Draper, N., 61 Churchill Road, Murrays Bay, Auckland.1310
ZL1BDJ	Monk, E. C. (Mrs), Matipo Avenue, Rotorua.3201
ZL1BDL	Meese, R. R., 66 Westview Crescent, Onerahi, Whangarei.0101
ZL1BDM	Hansen, A. F., No. 8 Punga Grove Avenue, Whangarei.0101
ZL1BDO	Mancer, E. S., 10 Delshaw Avenue, Stanmore Bay, Whangaparaoa.1463
ZL1BDP	James, J. R., 53 Hatepe Avenue, Taupo.3300
ZL1BDQ	Wilkins, S. J., Baddeleys Beach, R.D. 2, Matakana, Warkworth.1492
ZL1BDR	Griffin, E. F., 1 Charlton Avenue, Mt. Eden, Auckland.1003
ZL1BDS	McKay, G. N., 9 Jonathan Way, Paparangi, Wellington.6004
ZL1BDT	Ngakuru, N. H., 31 Wihongi Street, Kaikohe.0400
ZL1BDU	Catton, R., 39 Andrew Road, Howick.1705
ZL1BDV	Schischka, G., 4 Gilliam Street, New Lynn, Auckland.1207
ZL1BDY	Seakins, J. M., 99 Exmouth Road, Northcote, Auckland.1309
ZL1BDZ	Hoban, C. J. (Mrs), No. 4 R.D., Te Awamutu.2400
ZL1BEB	Williams, P., Kaihere, R.D.1, Ngatea.2852
ZL1BEC	Cobham, W. T. R., 24 Pukeko Street, Rotorua.3201
ZL1BED	Patchett, P. B., 35a Roberts Road, Te Atatu South, Auckland.1208
ZL1BEF	Fitzgerald, B. E., 39 Mount View Road, Melville, Hamilton.2001
ZL1BEG	McFarlane, G. M., 3 Tui Place, Tokoroa.2392
ZL1BEH	Linscott, D. A., 11 Puia Street, Taupo.3300
ZL1BEI	Ellis, M. R., 22 Oldwood Street, Christchurch.8005
ZL1BEJ	McCabe, B. R., 130 Takahe Road, Titirangi, Auckland.1207
ZL1BEK	McTurk, P. T. R., 40 Silverton Road, Waihi.2991
ZL1BEL	Lees, B., 172 Whitford Road, Howick.1705

ZL1BEM	Lockwood, D. C., 7 Adams Street, Waihi.2991
ZL1BEN	Doggett, G. A., 3/13 Hooker Place, Papatoetoe, Auckland.1701
ZL1BEP	Sharpe, N. R., Twinpines Orchard, Waimate North, R.D. 1, Ohaeawai.0454
ZL1BEQ	McGee, S. R., Lewis Road, Otakiri, R.D.3, Whakatane.3400
ZL1BER	Wood, G. J., Athenree, R.D. 1, Katikati.3051
ZL1BES	Barnes, J. C., Kaipara Flat Road, Warkworth, Auckland.1492
ZL1BET	Copeman, N. J. P., Trig Road, R.D. 1, Helensville.1451
ZL1BEU	Jamieson, L. I. D., Ngunguru, R.D. 3, Whangarei.0250
ZL1BEV	Derecourt, M. J., 2 Stonehurst Avenue, Waiuku.1852
ZL1BEW	Dodds, P. B., 42 Waimarie Road, Whenuapai Village, Kumeu.1454
ZL1BEX	Wilson, A. L. G., 16 Rahiri Road, Mt. Eden, Auckland.1004
ZL1BEY	Smart, J. B., 157 Rodney Street, Wellsford.1493
ZL1BEZ	Miller, P. G., C/- WO and SNCO Mess, RNZAF Base, Shelly Bay, Private Bag, Wellington.6020
ZL1BFA	Butcher, P. D., 6 Kamah Place, Rotorua.3201
ZL1BFB	Walker, I. D., 51 Caronia Crescent, Mt. Roskill, Auckland.1004
ZL1BFC	Hellyar, J. S., 25 Queens Parade, Devonport, Auckland.1309
ZL1BFD	Potts, G. C., Alfriston Road, R.D. 1, Manurewa.1732
ZL1BFE	Harland, J. C., 9 Papanui Street, Tokoroa.2392
ZL1BFF	McGrath, R., 4 Bank Street, Birkenhead, Auckland.1310
ZL1BFG	Munro, J. E., 24 Main Road North, Tairua, Thames.2853
ZL1BFH	Perkins, I. M., 74 Tawari Street, Matamata.2271
ZL1BFJ	Adams, L. B., 3 Sim Street, Matamata.2271
ZL1BFK	Frakes, M. C., 29 Riverside Drive, Waiuku.1852
ZL1BFL	Spayde, S. L., 57 Ngataringa Road, Devonport, Auckland.1309
ZL1BFM	Andrews, T. I., 29 Lily Street, Raglan.2051
ZL1BFN	Mathew, J. C. H., P.O.Box 234, Blenheim.7300
ZL1BFQ	Daniel, A. G., 83a Elliot Street, New Plymouth.4601
ZL1BFR	Beere, J. E. L., Main Road, R.D. 1, Howick.1731
ZL1BFS	Birt, K. D., 3 Cheeseman Place, Meadowbank, Auckland.1105
ZL1BFV	Huckin, G. S., 56 Don Buck Road, Massey, Auckland.1208
ZL1BFX	Broadley, C. L., 32 Waiotahi Creek Road, Thames.2801
ZL1BFY	Donaldson, D. L., 80 Woolfield Road, Papatoetoe.1701
ZL1BFZ	Robertson, D. J., 29c Youngs Road, Papakura.1703
ZL1BGA	Martin, G. K., 26 Dundee Place, Blockhouse Bay, Auckland.1207
ZL1BGB	Glover, D. R., 5 Wyman Place, Pakuranga.1706
ZL1BGC	Trigg, D. M., Peria, R.D. 3, Kaitaia.0500
ZL1BGD	Marr, L. R., 22 Swan Crescent, Pakuranga, Auckland.1706
ZL1BGE	Whitwell, G. R., 3 Grace Street, Matata., P.O.Box 46, Matata.3453
ZL1BGH	George, L. H., 65 King Street, Opotiki.3472
ZL1BGI	McCarthy, A. C., 10 Karamu Crescent, Wainuiomata.6305
ZL1BGJ	Morrison, C. W., 3 Duncansby Road, Whangaparaoa.1463
ZL1BGK	Bugden, K. G., Nikau Gardens, State Highway 2, Thornton, Whakatane.3400
ZL1BGL	Zammit, P., 45 Logan Street, Dargaville.0300
ZL1BGN	Rounthwaite, T., 18 Duncan Avenue, Henderson, Auckland.1208
ZL1BGP	Paltridge, J. S., 3 Tutere Road, Papatoetoe.1701
ZL1BGQ	McChesney, G. R., 5/1 Oakland Avenue, Papatoetoe.1701
ZL1BGR	Maddern, D. E., 463 Turere Lane, Te Awamutu.2400
ZL1BGS	Waterhouse, F. L. K., Flat 5,Block B, Pensioner Flats, Maitland Street, Tauranga3001
ZL1BGT	Reid, L. R., 17 Luxor Place, Rotorua.3201
ZL1BGU	Felt, B., 103 Glamorgan Drive, Torbay.1330
ZL1BGV	Roberts, M. J., 11 Grey Street, Hamilton.2001
ZL1BGW	Maude, R. de M., 68 Levers Road, Otumoetai, Tauranga.3001
ZL1BGY	Owen, M. J., 157a Long Drive, St Heliers, Auckland.1105
ZL1BGZ	Forsyth, A. B., 37 College Road, Edgecumbe.3451
ZL1BHB	Riley, S. G., 18 Charles Road, Rotorua.3201
ZL1BHC	Walker, A. N., Crane Road, R.D.1, Kamo.0121
ZL1BHD	Wright, S. W., 16 Puckey Avenue, Kaitaia.0500
ZL1BHE	Matthews, J. F., 26 Oceanview Road, Northcote, Auckland.1309
ZL1BHF	Sloan, W. J., 20 Acorn Street, Royal Oak, Auckland.1003
ZL1BHG	Robinson, I. A. S., 8 Bledisloe Court, Pukekohe.1800
ZL1BHH	Ferguson, M. E., 5b Terrace Avenue, Mt. Maunganui.3002
ZL1BHI	Dingle, W. M., 363b Maungatapu Road, Tauranga.3001
ZL1BHJ	Dekker, J., 3 Irene Crescent, Hamilton.2001
ZL1BHL	Taylor, G. L., 46 Bruce Avenue, Hamilton.2001
ZL1BHM	Te Puke, C., Foster Road, R.D. 10, Frankton.2021
ZL1BHN	Oliver, K. W., P.O. Box 74-293, Market Road, Auckland.1130
ZL1BHO	Vickerstaff, A. A., Cottle Road, Taupaki, R.D. 2, Henderson, Auckland.1231
ZL1BHQ	Powell, J. F., 47 Becroft Drive, Forrest Hill, Auckland.1310
ZL1BHR	Kovac, J. D., 13 Wesley Street, Dunedin.9001
ZL1BHT	Newcombe, B. R., Wallace Road, Te Puna, R.D. 2, Tauranga.3021
ZL1BHU	Watson, A. G., 204a Valley Road, Mt. Maunganui.3002
ZL1BHV	Davis, W. H., 55 Pihanga Street, Taupo.3300
ZL1BHW	Parkinson, M. A., 24 Roosevelt Road, Rotorua.3201
ZL1BHX	Travaglia, A. S., Engineer's Residence, Kaitaia Hospital.0500
ZL1BHY	Young, C. R., 1 Aotearoa Terrace, Murrays Bay, Auckland.1310
ZL1BIB	Hookham, C. R., 3/405 Beach Road, Mairangi Bay, Auckland.1310
ZL1BIC	Byrnand, J. L., 5 Te Anau Place, Tikipunga, Whangarei.0101
ZL1BID	Davis, E. T., 1/31 Blease Street, New Lynn, Auckland.1207
ZL1BIE	Belcher, G. M., 52b Consols Street, Waihi.2991
ZL1BIF	Guthrie, S. J., 35 North Street, Ashhurst.5451
ZL1BIH	Hearn, W. A., R.D. 2, Warkworth.1492
ZL1BII	Shakes, L. C., 131 River Road, Kawerau.3452
ZL1BIJ	Williams, L., 8 Anna Watson Road, Bucklands Beach.1704
ZL1BIK	McKechie, K. H., 13 Cron Avenue, Te Atatu South., P.O.Box 69 051, Glendene, Auckland.1230
ZL1BIL	Edwards, M. B., Main Road, Walton.2273
ZL1BIN	Nutting, L. G. W. D., 49 Duncan Street, Raetihi.5172
ZL1BIO	Shepherd, I. H., 15 McKay Crescent, Dargaville.0300
ZL1BIP	Bingham, L. H., Walker Road East, R.D. 2, Katikati.3051
ZL1BIQ	Puffett, K. H., 51 McKean Avenue, Manurewa.1702
ZL1BIR	Rist, T. A., 22 Shortt Avenue, Mangere Bridge, Auckland.1701
ZL1BIS	Westaway, K. F., 59 Kainui Road, Hataitai, Wellington.6003
ZL1BIT	Davy, N. C., Chatham Avenue, Albany, R.D. 3, Auckland.1331
ZL1BIU	Tan, Y. K., 18 Wilmington Place, Forrest Hill, Auckland.1309
ZL1BIV	Garrett, J. W., 45 Karaka Road, Beachlands, Auckland.1705
ZL1BIW	Ward, L., 60 Ranfurly Street, Dargaville.0300
ZL1BIX	Soppet, D. A., 4a Ruarangi Road, Mt. Albert, Auckland.1003
ZL1BIZ	Henry, E. J. (Mrs), 27 McRae Road, Mt. Wellington, Auckland.1106
ZL1BJA	Hendriksen, R. H. E., No. 1 R.D., Wellsford.1493
ZL1BJB	Beale, D. J., Bremner Road, Drury, Auckland.1752
ZL1BJC	Orchard, L. J. (Mrs), 1 The Heads, Whakatane.3400
ZL1BJE	Appleby, W. M., 8 Brightside Road, Whangaparaoa, Hibiscus Coast.1463
ZL1BJF	Henderson, A. R., 322 St. Heliers Bay Road, St. Heliers, Auckland.1105
ZL1BJG	Gray, M. F., 31 Karewa Parade, Papamoa, Bay Of Plenty.3070
ZL1BJH	Jekel, H. B., 8 Oregon Place, Papakura.1703
ZL1BJI	Goodsir, J. W., 163 Glengarry Road, Glen Eden, Auckland.1207
ZL1BJJ	Morris, T. J., Paparoa Road, Te Puna, R.D. 2, Tauranga.3021
ZL1BJK	Turner, R. W., Te Kauri Village, R.D. 1, Katikati.3051
ZL1BJL	Williams, C., R.D. 2, Cambridge.2351
ZL1BJM	Cain, M. C., c/- S. Punter, 35 Halver Road, Manurewa.1702
ZL1BJN	Schlef, W. K., 13 Roslyn Road, Mt Wellington, Auckland.1106
ZL1BJO	Wright, W. O., 12 Syme Crescent, Kawerau, Bay of Plenty.3452
ZL1BJP	Parkinson, D. J., 36 Western Road, Otumoetai, Tauranga.3001
ZL1BJQ	Wardley, D. E., 45c Ambler Avenue, Glen Eden, Auckland.1207
ZL1BJR	Daley, J. A., c/- 11 The Esplanade, Eastern Beach, Auckland.1704
ZL1BJT	Dougan, J. K., 35 Tunis Road, Panmure, Auckland.1106
ZL1BJU	Thompson, N. K., 20 Waipuia Place, Greenhithe, R.D. 1, Auckland., P.O. 33-798, Takapuna, Auckland.1332
ZL1BJV	Turvey, W. W., 20 Nutsey Avenue, Northcote, Auckland.1309
ZL1BJW	Hallett, W. R., 17 Pauanui Pines, Kennedy Park Drive, Pauanui Beach.2850
ZL1BJX	Clark, L. D. G., 12 Richards Avenue, Papatoetoe.1701
ZL1BJY	Garratt, P. R., 294 Massey Road, Mangere East, Auckland.1701
ZL1BJZ	Farmer, J. B. S., 88 Ngapuhi Road, Remuera, Auckland.1105
ZL1BKA	McIntosh, G. S., 4 Alexander Avenue, Maraetai, Auckland.1705
ZL1BKB	Williams, C., 13 Wren Street, Woodlands, Waikanae.6154
ZL1BKC	De Langen, H., 9 Cambrai Road, Raglan.2051
ZL1BKD	Busch, C. T., cnr Chapel & Thomas Roads, Manukau City.1701
ZL1BKF	Marshall, O. H., 16 Dunlop Drive, Pauanui Beach.2850
ZL1BKG	Wilson, T. G., 53 Tirimoana Road, Te Atatu, Auckland.1208
ZL1BKH	Hogg, E. R., 33 Simmons Crescent, Rotorua.3201

ZL1BKI	Salmond, A. R., 2/9 Tomintoul Place, Howick.1705
ZL1BKJ	Sandlant, P. W., 17 Mayfair Crescent, Mairangi Bay, Auckland.1310
ZL1BKK	Edwards, K., 49 Ocean Road, Surfdale, Waiheke Island.1470
ZL1BKL	Lister, M. W. (Mrs), Jeffs Road, East Tamaki, R.D., P.O. Box 23-508, Papatoetoe East.1730
ZL1BKM	Engel, F. W., 33 Fairmount Road, Glen Eden, Auckland.1207
ZL1BKN	Codlin, J. K., 71 Great South Road, Manurewa.1702
ZL1BKP	Searle, K. A., 58 Gordon Street, Gisborne.3801
ZL1BKQ	Adams, C. W., 104b John Downs Drive, Browns Bay, Auckland.1310
ZL1BKR	Hill, R. S., 14 Sunline Place, Ngongotaha.3202
ZL1BKS	Wippo, J., Eastern Motel, 153 Mt Wellington Highway, Mt Wellington.1106
ZL1BKT	Dowding, P., 175 Beach Street, Waikouaiti.9162
ZL1BKU	Davidson, B. J., 130a Monarch Avenue, Northcote, Auckland.1309
ZL1BKV	Coombs, M. J., 13 Crispian Place, Weymouth, Auckland.1701
ZL1BKW	Lees, G. D., Coulter Road, R.D. 1, Henderson, Auckland.1208
ZL1BKX	Rodgers, A. E., P.O. Box 19006, Avondale, Auckland.1230
ZL1BKY	Rankin, A. N., 85 Hastings Road, Mairangi Bay, Auckland.1310
ZL1BKZ	Henry, R. I., 27 McRae Road, Mt. Wellington, Auckland.1106
ZL1BLA	Fox, R. D., 36 Galaxy Drive, Mairangi Bay, Auckland.1310
ZL1BLB	Churcher, B. R., 80 Hapburn Road, Glendene, Auckland.1208
ZL1BLC	Morris, T. N. J., 47 Boundary Road, Blockhouse Bay, Auckland.1207
ZL1BLD	Ward, M. T., Silverhill Road, Te Hana.1490
ZL1BLE	Stewart, R. D., Tauhoa, R.D.4, Warkworth.1492
ZL1BLF	Poletti, M. J., 69 Willis Road, Papakura.1703
ZL1BLG	Borland, K., 6 Wendywood Lane, Kerikeri.0452
ZL1BLH	Wilson, A. B., 17b Mizpah Road, Waiake, Browns Bay, Auckland.1310
ZL1BLI	Ockleston, E. W., 25 Killarney Street, Takapuna, Auckland.1309
ZL1BLJ	Hutchins, M. G. D., Peras Road, Waima., c/- Post Office Taheke, Northland.0450
ZL1BLK	Elliott, K. L., 349a Beach Road, Browns Bay, Auckland.1310
ZL1BLL	Adnitt, E. (Mrs), 10 Laing Place, Otumoetai, Tauranga.3001
ZL1BLQ	Salmons, R. J., 2 Townhead Crescent, Tauranga.3001
ZL1BLR	Fish, L. G., 14 Willow Avenue, Hannah's Bay, Rotorua.3201
ZL1BLS	Smith, J. B., 45 Thornlow Street, Glendene, Auckland.1207
ZL1BLT	Alderwick, G. B., 18 Taieri Crescent, Kelson, Lower Hutt.6301
ZL1BLU	Anderson, P. A., 6 Gerontius Glade, Torbay, Auckland.1310
ZL1BLV	Howells, D., 5 Weka Street, Rotorua.3201
ZL1BLW	Cook, L. J., McCarthy Street, Waihou.2972
ZL1BLX	Weston, G. A., 179 Rosebank Road, Avondale, Auckland.1207
ZL1BLY	Goodbrand, J. A., 12 Windsor Avenue, Kamo, Whangarei.0101
ZL1BLZ	Tunnicliffe, G. W., 16 Wilding Avenue, Northcote, Auckland.1309
ZL1BMA	Grey, G. R., 35 Kennedy Avenue, Forrest Hill, Auckland.1310
ZL1BMB	Moroney, P. R., 12 Pallant Street, Manurewa.1702
ZL1BMC	Peters, D. E., 80 Pohutukawa Avenue, Ohope.3454
ZL1BMD	Shaw, R. K., 49 Sea Vista Drive, Pukerua Bay, Auckland.1106
ZL1BMF	Musgrave, J. L., 2 Vanessa Crescent, Glendowie, Auckland.1105
ZL1BMG	Slone, J., Thornton Road, R.D. 1, Cambridge.2351
ZL1BMH	Baker, R. F., 2/18 Tui Glen Road, Birkenhead, Auckland.1310
ZL1BMI	Wilson, E. L., 368 Pt Chevalier Road, Pt. Chevalier, Auckland.1002
ZL1BMJ	Taylor, A. K., 65 Uxbridge Road, Howick.1705
ZL1BMK	Watt, R. G., 15 McKay Crescent, Dargaville.0330
ZL1BML	Harris, A. W., 20 Buckland Road, Papatoetoe North, Auckland.1701
ZL1BMO	Steele, T. M., 88 Redhill Road, Papakura.1703
ZL1BMP	MacMillan, L. P. A., 15 Godden Crescent, Mission Bay, Auckland.1105
ZL1BMQ	Marr, A. H., 5 McLennan Road, Mt Wellington, Auckland.1106
ZL1BMT	Haultain, A., 54 Henderson Street, Whakatane.3400
ZL1BMU	Lowry, M. R., Lowry Road, Bombay, Auckland.1750
ZL1BMV	Walker, V. L., Kings Road, Paihia.0252
ZL1BMX	Greenaway, W. P., 10 Searanke Place, Hamilton.2001
ZL1BMY	Clegg, R. J., 47 Churchill Road, Murrays Bay, Auckland.1310
ZL1BMZ	Padgett, A. B., 22 Finnerty Avenue, Howick, Auckland.1705
ZL1BNA	Marr, W. R. G., 27 Houhere Place, Tikipunga, Whangarei.0101
ZL1BNB	Newman, M. D., 30 Nikau Street, Wanganui.5001
ZL1BNC	Murray, L. G., 9 Maungawhare Place, Tauranga.3001
ZL1BNE	Williamson, R., 21 Lyttelton Avenue, Forrest Hill, Auckland.1310
ZL1BNF	James, A. H., Pyes Pa Road, R.D. 3, Tauranga.3021
ZL1BNG	Orton, N. J., 11 Glamis Avenue, Hamilton.2001
ZL1BNH	Murphy, P. M., Oaklands Road, R.D. 1, Papakura.1733
ZL1BNI	Brant, P. A., 41 Regent Street, Papatoetoe.1701
ZL1BNJ	Pedersen, W. J., Union Street, Opotiki.3472
ZL1BNK	Painting, F. J., 26 Greenacres Drive, Kawa Kawa.0271
ZL1BNL	Schrickel, H. J. E., 8 McPherson Street, Remuera, Auckland.1105
ZL1BNM	Larcombe, D. C., 21 Cornelian Crescent, Bucklands Beach.1704
ZL1BNN	Brill, A. J., 83 Stott Avenue, Birkdale, Auckland.1310
ZL1BNO	Twiname, M. H., 2/4 Burt Road, Mt Wellington, Auckland.1106
ZL1BNP	Were, B. J., 28 Lachlan Drive, Dinsdale, Hamilton.2001
ZL1BNQ	Gamble, A. A. R., 28 Barnhill Drive, Papakura.1703
ZL1BNR	Sando, B. C., 1 Rahopara Street, Castor Bay, Auckland.1310
ZL1BNS	Rowe, R. G., 32 Manawa Road, Remuera, Auckland.1105
ZL1BNT	Murray, K. G., 5 Te Puia Street, Kamo, Whangarei.0101
ZL1BNV	Keatinge, R. N., 7/232 Mt Wellington Highway, Mt. Wellington, Auckland.1106
ZL1BNW	Collin, J. V., 65 Paine Street, Judea, Tauranga.3001
ZL1BNX	Toft, T. B., 19b Ngapuhi Road, Remuera, Auckland.1105
ZL1BNY	Shakes, D. B., 12 Deuxberry Avenue, Northcote, Auckland.1309
ZL1BNZ	Clough, D. L. W., 5 Kelly Street, Rotorua.3201
ZL1BOA	Wigg, J. D., 42 Deep Creek Road, Waikowhai, Auckland.1310
ZL1BOB	Morgan, G. B., 26 Otaika Road, Whangarei.0101
ZL1BOC	Dennis, G. A., 91 Bridge Street, Opotiki.3472
ZL1BOD	Norrie, B. C., 102 Browns Bay Road, Browns Bay, Auckland.1310
ZL1BOE	Muir, C. B., 429 Whitford Road, Howick, Auckland.1705
ZL1BOF	Urquhart, G. A., 9 Four Trees, Howick.1705
ZL1BOG	Donnelly, D. R., 51 Karaka Street, Hamilton.2001
ZL1BOH	Dermody, J. M., 11 Totara Park, Matakana Road, Warkworth.1492
ZL1BOI	Clinton-Baker, D., Masterton/Martinborough Road, R.D. 4, Masterton.5921
ZL1BOJ	Wilson, W. J., 22 Larcy Road, Lynmore, Rotorua.3201
ZL1BOK	Rowntree, R. J., 106 New Windsor Road, Avondale, Auckland.1207
ZL1BOM	Glasgow, M. R., 124 Grange Road, Tauranga.3001
ZL1BON	White, N. C., Station Road, Omokoroa, R.D. 2, Tauranga.3050
ZL1BOP	Emery, N. F., 10 Charmaine Road, Torbay, Auckland.1310
ZL1BOQ	Duffy, D. B. H., 53 Chorley Avenue, Massey, Auckland.1208
ZL1BOR	McNamara, L. I. (Mrs), 32 Galileo Street, Ngaruawahia.2171
ZL1BOS	Williams, J. B., Kainui Road, R.D.1, Taupiri.2151
ZL1BOT	Shuker, C. J., 18 Mason Avenue, Pukekohe.1800
ZL1BOU	Moroz, Z., 5 Kayle Glen, Massey, Auckland.1208
ZL1BOW	Fendley, G. L., 10 Vanda Place, Greerton, Tauranga.3001
ZL1BOY	Minchin, H. E., House 48, C/- Post Office, Arapuni.2370
ZL1BOZ	Williams, G. C., North Road, R.D.2, Papakura.1733
ZL1BPA	Corin, T. G., 2 Innisfree Drive, Ellerslie, Auckland.1105
ZL1BPB	Smith, R. A., 37 Kensington Road, Waihi.2991
ZL1BPD	Cochrane, C. D., 100 Manaia Road, Tokoroa.2392
ZL1BPE	Scutts, L. J., 12 Disraeli Street, Mt Eden, Auckland.1003
ZL1BPF	Wilcox, H. J., 64 Taylor Road, Mangere Bridge, Manukau City.1701
ZL1BPG	Jones, N. E., 16 Woodbridge Lane, Milford, Auckland.1309
ZL1BPH	Fransham, G. E., 29 Tamaki Avenue, Otahuhu, Auckland.1106
ZL1BPI	Ronke, B. R., Weston Lea Drive, R.D. 2, Hamilton.2021
ZL1BPJ	Christensen, R. A., 13 Manson Street, Greerton, Tauranga.3001
ZL1BPK	Junge, A. G., 128 Stanley Avenue, Te Aroha.2971
ZL1BPM	Browne, L. (Mrs), 23 Te Puia Street, Kamo, Whangarei.0101
ZL1BPN	Johnson, E. A., 11 Kowhai Park Road, Whangarei.0101
ZL1BPO	Bach, E. A., 134 Methuen Road, Avondale, Auckland.1207
ZL1BPP	Wilkins, D. J. H., 12 Valdese Rise, Browns Bay, Auckland.1310
ZL1BPQ	Nettleingham, F. J., Matahui Road, Katikati.3051

ZL1BPR	Dunn, J. R., 264 Glenvar Road, Torbay, Auckland.1310
ZL1BPS	Winefield, J. W., 1/35 Cliff Road, St Heliers Bay, Auckland.1105
ZL1BPT	Burrage, S. G., 1/58a Maskell Street, St Heliers, Auckland.1105
ZL1BPU	Greenman, M., 43a Wheturangi Road, One Tree Hill, Auckland.1105
ZL1BPV	McLellan, A. D., 55 Orion Street, Rotorua.3201
ZL1BPW	Foreman, Q. S., 4c Seaview Road, Milford, Auckland.1309
ZL1BPX	Ansley, B. K., 114 Eskdale Road, Birkenhead, Auckland.1310
ZL1BPY	Glasson, P. R., 6 Challenger Street, St. Heliers, Auckland.1105
ZL1BPZ	Chatfield, D. J., c/- 300 Queens Drive, Lyall Bay, Wellington.6003
ZL1BQA	Doell, E. D., 11 Sandspit Road, Waiuku.1852
ZL1BQB	Howie, P. C., 28 Pohutukawa Road, Beachlands.1705
ZL1BQC	Woolf, P. H., 6 Rawhiti Road, Onehunga, Auckland.1106
ZL1BQD	Runciman, R. J., 36 Cardiff Road, Pakuranga.1706
ZL1BQE	Dix, K., 21 Adel Place, Weymouth, Auckland.1701
ZL1BQF	Ryan, L. J., 11 Ngaire Avenue, Epsom, Auckland.1003
ZL1BQH	Lawson, T. A., 19 View Road, Glenfield, Auckland.1310
ZL1BQI	Milne, A. W., 56 Hamarana Road, R.D.1, Omokoroa, Tauranga.3021
ZL1BQJ	Tetenburg, C. R., 42 Pererika Street, Rotorua.3201
ZL1BQK	Shackleton, R. V., 8 Rongopai Place, Kaitaia.0500
ZL1BQL	Robinson, L. K., 5 Mera Road, Algies Bay, Warkworth.1492
ZL1BQM	Walker, B. F., 23 Jaemont Avenue, Te Atatu South, Auckland.1208
ZL1BQN	Green, E. N., 499 Otumoetai Road, Tauranga.3001
ZL1BQO	Hynds, A. G., 1/21 Arundel Street, Tauranga.3001
ZL1BQP	Buckton, M. D., 14 Cockle Bay Road, Howick., P.O.Box 38500, Howick.1731
ZL1BQQ	Lowther, B. L., 5 Grey Street, Opotiki.3472
ZL1BQS	Sadgrove, P. C., 55 Dignan Street, Point Chevalier, Auckland.1002
ZL1BQT	Le Varre-Waters, I. D., 127 Whitney Street, Blockhouse Bay, Auckland.1207
ZL1BQV	Rogan, J. K., 54 Lagoon Drive, Panmure, Auckland.1106
ZL1BQW	Armstrong, C. M., 5 Jervios Street, Kawerau.3452
ZL1BQX	Clark, L. C., 36a Jubilee Crescent, Whakatane.3400
ZL1BQY	Clayton, C. J., 19 The Esplanade, Bucklands Beach, Auckland.1704
ZL1BQZ	Jarvis, S. A., P.O. Box 2140, 61a James Street, Whakatane.3400
ZL1BRB	Rompa, A. P. A., 22 Abbotleigh Avenue, Te Atatu, Auckland.1208
ZL1BRC	Ross, S. J., 5 Roxy Terrace, Glendowie, Auckland.1105
ZL1BRD	Timms, D. E., Kendall Road, Kerikeri.0452
ZL1BRE	Kristensen, P., Keenan Road, R.D.3, Tauranga.3021
ZL1BRF	Stormont, B. I., 49 Kildare Avenue, St. Heliers, Auckland.1105
ZL1BRG	Macken, S. A. (Mrs), P.O. Box 233, Whangaparaoa.1463
ZL1BRJ	Furness, J. B., 2 Pukenui Road, Epsom, Auckland.1003
ZL1BRK	Stewart, D. A., 11 Kerry Dell, Howick.1705
ZL1BRL	Cornwall, P. J., 10 Park Avenue, Northcote, Auckland.1309
ZL1BRM	Ainsworth, C. R., 12a Correlia Road, Takapuna, Auckland.1309
ZL1BRN	Norgate, M. H., 49 West View Crescent, Onerahi, Whangarei.0101
ZL1BRO	Brenner, B. N., 67 Norwood Road, Bayswater, Auckland.1309
ZL1BRP	Price, P. G., 16 Ruahine Street, Tauranga.3001
ZL1BRQ	Macken, C. G. C., P.O. Box 233, Whangaparaoa.1463
ZL1BRR	Wallace, M. R., 37 Church Street, Onerahi, Whangarei.0101
ZL1BRS	Sutherland, S. D., 5a Manuka Street, Otaki.6171
ZL1BRT	Benjamin, R. D., 18 Oliver Road, Bucklands Beach, P.O. Box 54-067.1730
ZL1BRU	Gilbert, W. S., 25 Bay View Road, Raglan.2051
ZL1BRV	Gardiner, P. R., 3 Nyssa Place, Totara Heights, Manurewa.1702
ZL1BRW	Boghurst, A. D., 70 Ostend Road, Ostend, Waiheke Island.1470
ZL1BRX	Bain, E. M., 58 George Crescent, Buckland, R.D. 2, Pukekohe.1800
ZL1BRY	Anderson, H. C., R.D. 5, Otorohanga.2554
ZL1BSB	Sutherland, C. E., Ruaroa Road, Post Office, Kaitaia.0500
ZL1BSC	Pearce, S. W., 16 Donald Road, Kaitaia.0500
ZL1BSD	Millett, J. C., 5 Mariners Grove, Algies Bay, Warkworth.1492
ZL1BSE	Stitt, E. L., Coopers Beach Motor Camp, R.D. 3, Kaitaia.0500
ZL1BSF	Talsma, P., 22a MacDonald Road, Glenview, Hamilton.2001
ZL1BSG	Pearce, T. K. L., 23 Aurea Avenue, Pakuranga, Auckland.1706
ZL1BSH	The 807 Contest Group, (Trustees: ZL1GO, ZL1SC), P.O. Box 39-374, Auckland.1230
ZL1BSI	Hetherton, J. K., 36 Norton Road, Cherrywood, Tauranga.3001
ZL1BSJ	Stewart, R. C., 20 Lilian Place, Pakuranga.1706
ZL1BSM	Te Aroha and District R.C. Branch 77 NZART (Inc.), see Branch Directory
ZL1BSN	Wallingford, N., 55 Watling Street, Tauranga.3001
ZL1BSO	Harvey-Brain, V. C., 7 Hamilton Road, Surfdale, Waiheke Island.1470
ZL1BSP	Gallert, W. H., 51 Pohutukawa Avenue, Whenuapai.1450
ZL1BSR	Smith, D. J., 67 Harbour View Road, Omokoroa.3050
ZL1BSS	Hawker, A. R., 94 Harrington Road, Henderson, Auckland.1208
ZL1BST	Stirling, B. T., 91 Kimihia Road, Huntly.2191
ZL1BSU	Coles, H. G., 3/6 John Street, Mangere., P.O.Box 86-025, Mangere East.1730
ZL1BSV	Mace, R. J., 9 Grampian Street, Tokoroa.2392
ZL1BSW	Deng, A. G., 65 Orams Road, Manurewa.1702
ZL1BSX	Richmond, M. N., 46 Kings Road, Paihia, Bay of Islands.0252
ZL1BSY	Gerritsen, J., Old Te Aroha Road, Matamata.2271
ZL1BSZ	Cummins, J. E.(Mrs), 682 Pakura Street, Te Awamutu.2400
ZL1BTA	Rodgers, S. J., 19 Craddock Street, Avondale, Auckland.1207
ZL1BTB	Pinfold, M. A. (Dr), 28 McKenzie Road, Rotorua.3201
ZL1BTC	Churchouse, M. J., 48 Selwyn Road, Howick.1705
ZL1BTD	Smith, T. S., 122a Birkdale Road, Birkdale, Auckland.1310
ZL1BTF	Rogers, L. A., Spains Road, Awanui.0552
ZL1BTG	Tomlinson, G. H. J., 372 Mahurangi East Road, Snells Beach, Warkworth.1490
ZL1BTH	Lundy, C. S., 19 Challinor Street, Hamilton.2001
ZL1BTI	Moroney, R. J., Flanagan Road, Drury.1752
ZL1BTJ	Blythen, L. E., 2/63 Oakdale Road, Hillsborough, Auckland.1004
ZL1BTK	Parkinson, R. J., 70 Vandeleur Avenue, Birkdale, Auckland.1310
ZL1BTL	Rowe, N. G., 33 Hoteo Avenue, Hunters Corner, Papatoetoe.1701
ZL1BTM	Stratford, N. E., Main Road, Cable Bay, R.D. 3, Kaitaia.0500
ZL1BTP	Tubby, E. L. (Mrs), 470 Beach Road, Papamoa.3070
ZL1BTQ	Allen, R., RNZN Field Station, Great Barrier Island.1470
ZL1BTR	Jeffares, R. J., 52 Amy Street, Ellerslie, Auckland.1105
ZL1BTS	Trebes, C. E., 11 Lamont Street, Hamilton.2001
ZL1BTU	Orange, L. R., 56 Holyoake Place, Birkenhead, Auckland.1310
ZL1BTV	Cheyne, G. A., c/- 87 Grange Road, Mt Eden, Auckland.1003
ZL1BTW	Halliday, H., 20 Hillcrest Road, Orewa.1461
ZL1BTX	van der Meulen, F. P., 20 Walter Street, Takapuna, Auckland.1309
ZL1BTY	Maindonald, D. C., 5 Peter Terrace, Castor Bay, Auckland.1309
ZL1BTZ	Dawe, L. J., 6 Linwood Avenue, Forrest Hill, Auckland.1310
ZL1BUB	Crymble, C. F., 19 Scotts Road, Manurewa.1702
ZL1BUC	Trigg, C. N., Peria, R.D. 3, Kaitaia.0500
ZL1BUD	Morris, G. A., Weston-Lea Drive, R.D. 2, Hamilton.2021
ZL1BUE	Dawson, J. W., Schultz Road, R.D.2, Waipu0254
ZL1BUF	Mullions, R. D., 23a Fairview Road, Rotorua.3201
ZL1BUG	Pearce, R. D. D., 22 Carina Crescent, Torbay, Auckland.1310
ZL1BUH	Cox-Smith, G. W., 7 Vectis Road, Hillcrest, Hamilton.2001
ZL1BUI	Willis, R. P., 32c Puckey Avenue, Kaitaia.0500
ZL1BUJ	Mackey, C. J., Richard Road, Kauri, Whangarei.0101
ZL1BUK	Duske, J. S., 11 Pendene Place, Forrest Hill, Auckland.1310
ZL1BUL	Holmes, N. E., 5 Saddleback Rise, Murrays Bay, Auckland.1310
ZL1BUP	Johnson, F. T. J., 49 Youngs Road, Papakura.1703
ZL1BUR	Linton, S. J., 66 Bridgman Road, Te Awamutu.2400
ZL1BUS	O'Brien, T. N., Wisemans Road, R.D. Waitoa.2973
ZL1BUT	Eggleton, P. W., 2/143a Manuka Road, Glenfield Heights, Auckland.1310
ZL1BUU	Levin, P. C., Tahuna Road, Ohinewai, Hamilton.2192
ZL1BUV	Lewis, F. T., 222 Glamorgan Drive, Torbay, Auckland.1310
ZL1BUX	Atchinson, I. M., 783 Great South Road, Papatoetoe, Auckland.1105
ZL1BUY	Finn, W. J., McLeods Bay, R.D. 4, Whangarei.0121
ZL1BUZ	Pont, A., 23 Mount View Drive, Rotorua.3201
ZL1BVB	Yuen, S. T. (Mike), 7 Dallas Place, New Windsor Heights, Auckland.1207
ZL1BVC	McNab, P. O., 27 Choise Avenue, Glendene, Auckland.1208
ZL1BVD	Skinner, D. E., R.D. 1, Raglan.2051
ZL1BVE	Lelieveld, J. J., 58 Montgomery Crescent, Hamilton.2001

ZL1BVF Keatinge, L. M. L. (Mrs), 8 Barnard Street, Matamata.2271
ZL1BVH Bishop, R. B., 11 Whiteacres Drive, Pakuranga, Auckland.1706
ZL1BVI Bolland, P. A., 50 Sunrise Avenue, Mairangi Bay, Auckland.1310
ZL1BVJ Jones, P., 41 Caronia Crescent, Mt Roskill, Auckland.1004
ZL1BVK Learmond, A. H., 14 Takapu Street, Henderson, Auckland.1208
ZL1BVL Morris, W. J.(Dr), 6 Ruha Street, Palmerston North.5301
ZL1BVM Sharman, R., Rawerawe Road East, R.D.2, Ngatea.2852
ZL1BVN van der Hulst, P. W., 212 Ohaupo Road, Hamilton.2001
ZL1BVO Messenger, G. E., 104 Elizabeth Street, Taupo.3300
ZL1BVP Chang, J. Y. S., 3 Madeleine Avenue, Glendowie, Auckland.1105
ZL1BVQ Edmonds, J. W., Ferry Road, Kerepehi.2950
ZL1BVR Parkinson, W. H. J., 51 Jacaranda Avenue, Birkdale, Auckland.1310
ZL1BVS Marquart, S. A. R., 29 Clyside Avenue, Bucklands Beach.1704
ZL1BVT Slegh, J. P., 2/69a Symonds Street, Royal Oak, Auckland.1106
ZL1BVU Erceg, P. J., 152 Morningside Road, Whangarei.0101
ZL1BVV Boylan, R. P., 59 Coronation Road, Glenfield, Auckland.1310
ZL1BVW Souchkoff, A. A., 28 Pentland Avenue, Mt. Eden, Auckland.1003
ZL1BVZ Dowling, B. N., 47 Gray Avenue, Mangere East, Auckland.1701
ZL1BWA Insley, M. E., c/- Giddens, 24 Rawene Avenue, Westmere, Auckland.1002
ZL1BWB Humphrey, G. A., 115 17th Avenue, Tauranga.3001
ZL1BWC Comber, J. P., 21 Castor Place, Rotorua.3201
ZL1BWD Dobbs, L., 2/31 Voltair Court, Howick, Auckland.1705
ZL1BWE Henneveld, L. R., 21 Butler Place, Kamo, Whangarei.0101
ZL1BWH Sheldon, B. R., 16 Carter Street, Mt. Maunganui.3002
ZL1BWI Rose, A., 34 Lyndhurst Road, Te Atatu South, Auckland.1208
ZL1BWJ Wham, C. J. L., 2 Bedford Crescent, Matamata.2271
ZL1BWK McConnochie, B. D., 8 Farmer Street, Te Aroha.2971
ZL1BWL Shaw, D. A., 15 Brown Street, Ponsonby, Auckland.1002
ZL1BWM Trayes, D. J., Beach Road, Ahipara, P.O. Box 50.0551
ZL1BWO Barnaby, N. S., 42 Mains Avenue, Whangarei.0101
ZL1BWP Horn, B. R., 5 Monique Place, Hamilton.2001
ZL1BWQ Le Cornu, E. M. O., Kiwitahi, R.D. 1, Morrinsville.2251
ZL1BWS Harris, J. M., 21 Tapper Crescent, Tikipunga, Whangarei.0101
ZL1BWT MacLean, A., 4 Quibray Place, Howick.1705
ZL1BWV Thompson, G. M., Otuhi Road, Maungatapere.0250
ZL1BWW Georgeff, N. P., 116 Springfield Road, Rotorua.3201
ZL1BWX Storey, G. K., 104 Eversleigh Road, Takapuna, Auckland.1309
ZL1BWY Collins, S. J., Beach Road, Kohukohu.0471
ZL1BWZ Harold, E. A. E., 32 Ellis Avenue, Mt. Roskill, Auckland.1004
ZL1BXA Buxton, H. C., 32 Castleton Street, Birkdale, Auckland.1310
ZL1BXB Grut, M. A., 97 Tiri Road, Whangaparaoa.1463
ZL1BXD Vencatachellum, V., 4/62 Kitchener Road, Milford, Auckland.1309
ZL1BXE O'Neil, E., 12/194a Hurstmere Road, Takapuna, Auckland.1309
ZL1BXF Young, M. B., 44 Toroa Street, Torbay, Auckland.1310
ZL1BXH Croucher, P. J., 73 Park Road, Te Awamutu.2400
ZL1BXI Flower, C. B. G., 3/41 Rangatira Road, Birkdale, Auckland.1310
ZL1BXJ Eman, J. J., 6 Shakespeare Road, Milford, Auckland.1309
ZL1BXK Herrold, N. G., Hall Road, R.D. 1, Waiuku.1852
ZL1BXM Miers, E. R., Lindquist Road, Ararua, R.D. 2, Matakohe.0353
ZL1BXN Cullen, O. D., R.D. 2 Maungaturoto, Northland.0272
ZL1BXO Grut, C. St. C, 97 Tiri Road, Whangaparaoa.1463
ZL1BXP Walsh, A. R., Kereone, R.D. 1, Morrinsville.2251
ZL1BXQ Walton-Tubb, A. I. P., 120 Maskell Street, St Heliers, Auckland.1105
ZL1BXR Robb, R. (Mrs), 8 Leonard Place, Greerton, Tauranga.3001
ZL1BXS Miller, P. G., R.D. 1, Russell.0293
ZL1BXT James, C. H., 16 May Street, Hamilton.2001
ZL1BXU Davis, L. H., 8 Muritai Street, Taupo.3300
ZL1BXV Todd, A. J., 46a Hutton Street, Otahuhu, Auckland.1106
ZL1BXW Modderman, E. J., 13 Ingram Street, Papakura.1703
ZL1BXX Hawkins, C. R., 56 Pine Avenue, Hamilton.2001
ZL1BXY Makin, W. H., c/- J. & C. Hook, Waimamaku.0474
ZL1BXZ Winsborough, L. F., 20 Williams Street, Cambridge.2351
ZL1BYA Martinson, L. R., 2/50 Howard Hunter Avenue, St Johns, Auckland.1106
ZL1BYB Stewart, L. F., 54 Forest Lake Road, Hamilton.2001
ZL1BYC Cornish, G. M.(Dr), Ponga Road, R.D. 4, Papakura.1733
ZL1BYD Emmett, G. J., 119 Udy's Road, Pakuranga, Auckland.1706
ZL1BYE Thomas, R. S., 54 Lynmore Avenue, Rotorua.3201
ZL1BYF Werder, K. J., Springdale Road, Waitoa.2973
ZL1BYG Morey, E. J., 301 Fairview Road, Te Awamutu.2400
ZL1BYH Farnborough, R., R.D.9, Rotokauri, Frankton.2031
ZL1BYI Ramsay, I. S., 8 Locke Avenue, Hillsborough, Auckland.1004
ZL1BYK Howell, H. G. M., 13 Bain Place, Bucklands Beach, Auckland.1704
ZL1BYL Alloway, F. R., Main Road, Tatuanui.2250
ZL1BYM Armstrong, P. G., Room 6, Block 6, Student Village, Waikato University.2001
ZL1BYN Thompson, N. M., 75 Walworth Avenue, Pakuranga, Auckland.1706
ZL1BYO Williamson, B. M., 158 Elizabeth Drive, Tokoroa.2392
ZL1BYQ Ashmore, R. W., c/- R. A. Eagle, Esdailes Road, R.D.6, Tauranga.3021
ZL1BYR Whyte, W. S., 4 Regent Street, Tauranga.3001
ZL1BYS Harris, R. H., 17 Navarre Road, Glendowie, Auckland.1105
ZL1BYU McAra, R. W., 241 Northbridge, Akoranga Drive, Northcote, Auckland.1309
ZL1BYV Greaves, I. G., 28 Acacia Bay Road, Taupo.3300
ZL1BYW Allan, W. W., Hairini, R.D. 5, Te Awamutu.2400
ZL1BYX Coatsworth, W. K., 7 Chartwell Crescent, Hamilton.2001
ZL1BYY Cartwright, G. T., 6 Haycock Avenue, Mt Roskill, Auckland.1004
ZL1BYZ Shaw, J. N., C/- Post Office, Paerata.1450
ZL1BZA Barnett, Z., "Pokuru", R.D. 5, Te Awamutu.2400
ZL1BZB Cox, G. W., 141 Garnet Road, Westmere, Auckland.1002
ZL1BZC Ash, D. E., 69 Tanekaha Road, Titirangi, Auckland.1207
ZL1BZD Bishop, N. L., 11 Whiteacres Drive, Pakuranga.1706
ZL1BZE Cordes, R. K., 177 Rathgar Road, Henderson, Auckland.1208
ZL1BZF Nesfield, J. C., 4/10 Akehurst Avenue, New Lynn, Auckland.1207
ZL1BZH Van der Zee, T. P., 46 Makoriri Beach Road, Gisborne.3801
ZL1BZI Newman, D. A., 112 The Avenue, Lynfield, Auckland.1004
ZL1BZJ Lodge-Osborn, D., Turanga Road, R.D. 1, Henderson, Auckland.1208
ZL1BZK Greenhill, D. R., 5 Hogan Street, Pukekohe.1800
ZL1BZL Ellis, D. G. R., 7 Kaiwaka Road, Onerahi, Whangarei.0101
ZL1BZM Cundy, C. R., Browns Bay Convalescent Home, 3-7 Woodlands Crescent, Auckland.1310
ZL1BZO Potts, D. M., 200 St Heliers Bay Road, St Heliers, Auckland.1105
ZL1BZP Kennard, T. J., 536a Tararu Road, Thames.2801
ZL1BZQ Galland, J. M. J. E., c/- 109 Norwood Road, Bayswater, Auckland.1309
ZL1BZS Chiswell, D. A., The Bulloch Track, R.D.3, West Mahurangi, Warkworth.1492
ZL1BZT Cawte, P. L., 332 Upper Harbour Drive, Greenhithe, Auckland.1310
ZL1BZV Surman, J. D., 27a Lloyd Avenue, Mt. Albert, Auckland.1003
ZL1BZW Rodger, T. R. R., 14 King Street, Cambridge.2351
ZL1BZX Hill, D. B., 25 Camellia Avenue, Ruakaka.0253
ZL1BZY Johnson, R. W., 8 Graham Street, Te Kopuru., P.O.Box 33, Te Kopuru.0356
ZL1BZZ Holmberg, R. E., R.D.5, Tauranga.3021
ZL1CAA Harrison, E. C., 3 St. Patrick Row, Whangamata.2992
ZL1CAB Whittaker, D. J., 4 Oak Place, Whakatane.3400
ZL1CAC Harsant, N. G., 66 Exmouth Road, Northcote, Auckland.1309
ZL1CAD Francis, S. D., 18 Patterson Street, Sandringham, Auckland.1003
ZL1CAE Skevington, B. E., 46 Prisk Street, Melville, Hamilton.2001
ZL1CAF Francis, M. E., P.O.Box 9313, Newmarket, Auckland.1031
ZL1CAG Bott, B., 12a Peri Street, Tauranga.3001
ZL1CAH Meyer, B. F. M., Hautapu, R.D. 1, Cambridge.2351
ZL1CAI Coleman, H. A., 19 Harbour Road, Ohope.3454
ZL1CAJ Coppell, G. G., 168 James Street, Whakatane.3400
ZL1CAK Miller, R. N., 30 Paine Street, Tauranga.3001
ZL1CAM Fitzpatrick, J. D., Lake Rotoma, R.D. 4, Rotorua.3221
ZL1CAN Lonergan, G., 84 4th Avenue, Tauranga.3001
ZL1CAO Mattler, C. K. H., 25 Seddon Street, Te Kuiti.2500
ZL1CAP Jones, L. R., 49 Vale Road, St. Heliers, Auckland.1105
ZL1CAQ Gregory, J. H., 29 Ruawai Road, Mt. Wellington, Auckland.1106
ZL1CAR Keymer, R. C., 10 Barbary Avenue, Kelston, Auckland.1207
ZL1CAS Howard-Taylor, A., 2/10 Arkles Drive, Arkles Bay, Whangaparaoa.1463
ZL1CAT Newland, P. J., 125 Taylors Road, Mt. Albert, Auckland.1003
ZL1CAU Earnshaw, M. B., 741 East Coast Bays Road, Browns Bay, Auckland.1310

ZL1CAV Van Kuilenburg, P. A., 45 Farrelly Avenue, Owairaka, Auckland.1004
ZL1CAW Jones, A. R., 213 Whitney Street, Blockhouse Bay, Auckland.1207
ZL1CAX Laird, A. G., P.O.Box 10, Mahia.4190
ZL1CAY Liddle, B. D., 3 Hinemotu Avenue, Kawerau.3452
ZL1CBA De Ridder, L. J., P.O. Box 246, Kerikeri.0452
ZL1CBB Nortje, F. C., R.D.1, Waiotira, Northland.0250
ZL1CBD Wilson, I. A., 28 Butler Road, Kerikeri.0452
ZL1CBE Wright, W. A., Main North Road, R.D.4, Kaitaia.0500
ZL1CBF Bobb, D. G. L., 30 Reynard Terrace, Takanini, Auckland.1702
ZL1CBG Bell, G. T., 328 One Tree Point Road, Ruakaka.0253
ZL1CBH Blake, J. R., 12 Sutton Close, Puriri Park Road, Maunu, Whangarei.0101
ZL1CBI Guilford, L. I., Rangitane, R.D.1, Kerikeri.0452
ZL1CBJ Edwards, W. H., 18 Shoebridge Crescent, Ngunguru, Whangarei.0250
ZL1CBK Bird, K. J., 84 Whau Valley Road, Whangarei.0101
ZL1CBL Dahl, N. L., Taratara Road, Kaeo.0556
ZL1CBN Tedbury, N. F.(Mrs), 24a Moody's Avenue, Whangarei.0101
ZL1CBO Beard, D. M., P.O.Box 208, Awanui.0552
ZL1CBP Bennie, A. A., California Hill, State Highway 10, Awanui.0552
ZL1CBQ Contesse, L. C., Kiripaka Road, Tikipunga, Whangarei.0133
ZL1CBR Jarman, J. D., Franklin Road, Parua Bay, Whangarei., P.O.Box 576, Whangarei.0100
ZL1CBS Peterson, R. J., c/- Taipa Area School, R.D. 3, Kaitaia.0500
ZL1CBT Beard, G. L., 11b Kohuhu Street, Kaitaia.0550
ZL1CBU Rankin, P. M., 7 Jenner Place, Avondale, Auckland.1207
ZL1CBV Rhodes, I. M., 1 Easton Park Parade, Glenfield, Auckland.1310
ZL1CBW Kenyon, P. N., 12 Hughs Terrace, Te Atatu North, Auckland.1208
ZL1CBX Hayward, G. E., 4 Miro Place, Whitianga.2856
ZL1CBY Blake, R. W., 45 Verbena Road, Birkenhead, Auckland.1310
ZL1CBZ Pavitt, I. D., Cool Gardens, Boord Crescent, R.D. 1, Kumeu.1454
ZL1CCA Myers, K. D., 57 Lynbrooke Avenue, Blockhouse Bay, Auckland.1106
ZL1CCC Devenish-Meares, M. H., 8 The Esplanade, Eastern Beach, Auckland.1704
ZL1CCD Cumin, M. H., 197 Chivalry Road, Glenfield, Auckland.1310
ZL1CCE Dearman, D. G., Cullen Street, Maungawhai Heads, Northland.0270
ZL1CCF Hatton, B. E., 306 East Coast Road, Takapuna, Auckland.1309
ZL1CCG McNeal, J. R., 1 Koraha Street, Remuera, Auckland.1105
ZL1CCI Anderson, J. C., 1a Cherry Place, Waiuku, Auckland.1852
ZL1CCJ Goodenough, A. R., 754 East Coast Road, Browns Bay, Auckland.1310
ZL1CCK Swinburn, N. B., 6 Bennett Street, Mt Albert, Auckland.1003
ZL1CCL Amster, M. S., 2/245 Kepa Road, Mission Bay, Auckland.1105
ZL1CCM Balmer, I. G., c/- Greenpeace New Zealand, Private Bag, Wellesley Street, Auckland.1036
ZL1CCN Pearce, P. B., 7 Marvon Downs Avenue, Pakuranga, Auckland.1706
ZL1CCO Cogan, D. G., 50 Konini Road, One Tree Hill, Auckland.1003
ZL1CCP Davis, T. A., 224 Kirkwood Street, Thames.2801
ZL1CCR Brown, P. F., 143 Grampian Street, Tokoroa., P.O.Box 302, Tokoroa.2392
ZL1CCS Blyde, J. V., Poland Street, R.D.2, Waihi2991
ZL1CCT Raglan Amateur Radio Club, see Branch Directory
ZL1CCU Wanner, R. G., R.D.2, Rukuhia Road, Ohaupo, Hamilton.2452
ZL1CCV Purves, P. S., 63b Tuhikaramea Road, Hamilton.2001
ZL1CCW Waikato Polytechnic, (Trustee ZL1IC), Telecom Section, Electrical Dept, Private Bag, Hamilton.2020
ZL1CCX McGuire, D. H., 14 Snell Crescent, Waihi Beach, Waihi.2990
ZL1CCY Scutts, W. J., 509 Brown Street, Thames.2801
ZL1CDA Clear, M. R., Limmer Road, R.D.8, Te Kowhai, Frankton.2030
ZL1CDB Gilbert, J. A., Ongarue Back Road, R.D.6, Taumarunui.2600
ZL1CDC Molloy, B. L., 460 Great South Road, Huntly.2191
ZL1CDD Van Beek, D. M., House 51, Arapuni.2370
ZL1CDG Boyd, R., 14 Dundas Street, Whitianga.2856
ZL1CDH Lindsey, A. R., 6 Walker Street, Waihi.2991
ZL1CDI King, M., c/- E & S Phillips, Victoria Road, R.D.1, Cambridge.2351
ZL1CDJ Kitchen, D. H., Hart Road, R.D.3, Hamilton.2021
ZL1CDL Lougher, P. W., c/- Wairere Deer Farm, R.D.2, Ngatapa, Gisborne.3821
ZL1CDM Roberts, D. F., 43 Domain Road, Whakatane.3400
ZL1CDN Burgess, B. W., 350 Ocean Road, Ohope.3454
ZL1CDP Braid, J. B., 16/2 Burrows Street, Tauranga.3001
ZL1CDQ Powell, G. W., 241 Dickson Road, Papamoa, R.D.7, Te Puke.3071
ZL1CDR Kevey, E. F., East Otara Road, Opotiki., P.O.Box 116, Opotiki.3472
ZL1CDS Skilton, D. B., 1/89 Chapel Street, Tauranga.3001
ZL1CDT Greenaway, S. M., 11 Darragh's Road, Otumoetai, Tauranga.3001
ZL1CDU O'Loughlin, B. G., Heads Road, McLeods Bay, Whangarei.0101
ZL1CDV Brabant, G. C., 83 Riverside Drive, Whakatane.3400
ZL1CDW Keel, K. P., 14 Haig Street, Whakatane.3400
ZL1CED Lee, J., c/- 32b Martin Road, Manurewa, Auckland.1702
ZL1CEG Gates, A., 542 Whangaparaoa Road, Whangaparaoa.1463
ZL1CEH McMaster, A. J., 19 Mons Avenue, Mt Roskill, Auckland.1004
ZL1CEJ Francis, W. D., P.O.Box 9313, Newmarket, Auckland.1031
ZL1CUT Alexander, C. J. (Dr), 49 Richard Farrell Avenue, Remuera, Auckland.1105
ZL1NAH Cox, B. B., 21 Polandson Place, Papakura.1703
ZL1NAI Mumford, C. N., 6 Graham Street, Ruakaka.0253
ZL1NAJ Harvey, K. A, 16 Tikorangi Place, Whangarei.0101
ZL1NAK Simpson, E. A., 4 Nixon Street, Whangarei.0101
ZL1NAM Muzyka, G. Y., 33 Vermont Street, Ponsonby, Auckland.1002
ZL1NAS Higgins, A., 14 Anthony Crescent, Hamilton.2001
ZL1NAT Horn, S. M., 5 Monique Place, Hamilton.2001
ZL1NAW Byrnes, J. A. L., 14 Sunset Crescent, Tauranga.3001
ZL1TAA Miller, N. S., 134 College Road, Edgecumbe.3451
ZL1TAB Thomas, R. P. T., 21 High Road, Glenfield, Auckland.1310
ZL1TAC Ramsay, D. J., 10 Mary Henry Place, Whakatane.3400
ZL1TAD Johnston, R. B., 3 Beere Place, Meadowbank, Auckland.1105
ZL1TAE English, B. D., 35a Yattendon Road, St Heliers, Auckland.1105
ZL1TAF Anderson, A. W., 32 Gilmour Street, Waihi.2991
ZL1TAG Plimley, A. E., 104 Porawai Road, Thames.2801
ZL1TAH Norris, L.R., 4 Gordon Street, Hamilton.2001
ZL1TAI McBurney, R. T., 25 Hamilton Road, Papatoetoe.1701
ZL1TAK Sergent, P. A., 20 Marie Avenue, Te Atatu South, Auckland.1208
ZL1TAM Teh, Y. W.(Dr), Doctors Hill Road, Waipu.0254
ZL1TAN O'Callaghan, D. R., 10 Raumati Road, Remuera, Auckland.1105
ZL1TAO Kimber, W. C., 50 Main Road, Titahi Bay, Wellington.6202
ZL1TAP Adams, R. J. J., 7 London Street, St Mary's Bay, Auckland.1001
ZL1TAQ Logan, H., 27 Carlton Crescent, Maraetai Beach, Auckland.1705
ZL1TAR Wilkinson, R. N., 19 Island Bay Road, Beachhaven, Auckland.1310
ZL1TAS Aymes, A. O., 37 Alison Street, Hamilton.2001
ZL1TAT Brown, I. W., 35 Lancaster Street, Hamilton.2001
ZL1TAU Coghlan, P. R., 18 Essex Street, Te Atatu South, Auckland.1208
ZL1TAV Small, B. C., 62 Paice Avenue, Sandringham, Auckland.1003
ZL1TAW Totman, T. W., 1/91 Browns Road, Manurewa.1702
ZL1TAX Andrews, S. D., 283 Hukanui Road, Hamilton.2001
ZL1TAY Thornton, D., 2/24 Stanley Avenue, Milford, Auckland.1309
ZL1TAZ Purdy, G. N., 4 Ramelton Road, Mt. Roskill, Auckland.1004
ZL1TBA Parsons, D. R., 12 Mutu Street, Te Awamutu.2400
ZL1TBB Carter, R., 1218 Huia Road, Huia, Auckland.1450
ZL1TBE Goode, R. J., 1/11 Lovelock Avenue, Mt. Eden, Auckland.1003
ZL1TBG Sanson, R. G., 55 Bertram Street, Warkworth.1492
ZL1TBI Archibald, G., C/- Mrs A. Were, 12 Western Street, Matamata.2271
ZL1TBJ Burrows, J. J., 2 West Lynn Road, New Lynn, Auckland.1207
ZL1TBL Uren, P. E., 91 Hakanoa Street, Huntly.2191
ZL1TBM Harvey, R. F., 33 Birdwood Avenue, Papatoetoe.1701
ZL1TBN Sanders, P., 19 Sunny Hills Avenue, Hamilton.2001
ZL1TBO Phillips, R. A., 16 Douglas Avenue, Mt Albert, Auckland.1003
ZL1TBP Croll, D., 25 Pouwhare Street, Whakatane.3400
ZL1TBQ Angell, A. R., 49 Crane Street, Mt. Maunganui.3002
ZL1TBR McIntyre, R., 3 Tihi Road, Rotorua.3201
ZL1TBS Smith, L. J., 123 Sandspit Road, Howick, Auckland.1705
ZL1TBT Duncan, G. E., 66 Albrecht Avenue, Mt Roskill, Auckland.1004

ZL1TBU	Doherty, G. F., 2/23 Santiago Crescent, Glenfield, Auckland.1310
ZL1TBV	Russ, G. M., c/- 4c Seaview Road, Milford, Auckland.1309
ZL1TBW	Matthews, D. B., 30 Fairburn Street, Otaika.0101
ZL1TBX	Bott, A. D., 28 Calgary Street, Sandringham, Auckland.1003
ZL1TBY	Seccombe, J. G., Oaklands Road, R.D. 1, Papakura.1733
ZL1TBZ	Tatton, W. C., 7 Realm Place, Massey, Auckland.1208
ZL1TCA	Chatterton, B., 6 Littler Place, Hamilton.2001
ZL1TCB	Grange, D. L., 29 Tane Road, Laingholm, Auckland.1207
ZL1TCC	Topfer, K. K., 11 Edith Place, Hamilton.2001
ZL1TCE	Nation, D. L., 3 Thames Street, Hamilton.2001
ZL1TCF	Fortune, T. La T., 129 Bleakhouse Road, Howick.1705
ZL1TCG	Neal, S.G.M., 40 Rodney Street, Wellsford.1493
ZL1TCH	Nielsen, D., 21 Alice Avenue, Orewa.1461
ZL1TCJ	Jackson, L. H., 55 Whytehead Crescent, Kohimarama, Auckland.1105
ZL1TCK	Woolley, M. G., 5a Springbank Lane, Te Atatu North, Auckland.1208
ZL1TCL	Forlong, R. D., 4/20 Meadowland Drive, Hamilton.2001
ZL1TCM	McGlashan, I., Waitoki, Kaukapakapa.1453
ZL1TCN	Herbert, E. R., 44 Wylie Street, Tauranga.3001
ZL1TCO	Tapp, A. J., Mt. Tiger Road, Whangarei.0101
ZL1TCP	Mattler, J. L., 25 Seddon Street, Te Kuiti.2500
ZL1TCR	Bell, K. G., 174 Carnoustie Drive, Wattle Downs, Manurewa, Auckland.1702
ZL1TCT	Dennison, R. A., 26 Oriana Avenue, Lynfield, Auckland.1004
ZL1TCU	Legg, M. E., 35 Blackmore Drive, Rotorua.3201
ZL1TCV	Frazerhurst, W. K., 12 Loloma Drive, Bucklands Beach.1704
ZL1TCW	Dancy, T. M., 35 McMillan Place, Howick.1705
ZL1TCZ	Turnwald, F. L., 29 Cliff View Drive, Green Bay, Auckland.1207
ZL1TDA	Harvey, M. C., 16 Pearsons Avenue, Hamilton.2001
ZL1TDB	Raffles, M. T. (Mrs), 54 Rockfield Road, Ellerslie, Auckland.1105
ZL1TDC	Purves, G. S., c/- A.N.Thomson, Te Kawa Road, R.D.3, Te Awamutu.2400
ZL1TDD	Zeusche, P. R., C/- 48 Handforth Street, Onerahi, Whangarei.0101
ZL1TDE	Davis, W. L., 48 Chatsworth Crescent, Pakuranga, Auckland.1706
ZL1TDF	Blair, D. J., 15 Tramway Road, Birkdale, Auckland.1310
ZL1TDG	Morris, V., 116 Union Road, Howick, Auckland.1705
ZL1TDH	Greenbrook, G. R., 17a Fraser Road, Devonport, Auckland.1309
ZL1TDI	Lee, C. P., 117 Chelsea View Drive, Birkenhead, Auckland.1310
ZL1TDJ	Burton, R. D., 11 Henderson Valley Road, Henderson, Auckland.1208
ZL1TDK	Gotz, M. T., 14 Roosevelt Road, Rotorua.3201
ZL1TDL	Littin, A. C., Te Hana, 1 R.D., Wellsford.1493
ZL1TDM	Long, J. M., 137 Moore Street, Howick, Auckland.1705
ZL1TDN	Gabbie, O. J., 3 Hobson Street, Waihi.2991
ZL1TDO	Campbell, L. M., 7 Queensway, Three Kings, Auckland.1004
ZL1TDP	Clough, S. D., 5 Kelly Street, Rotorua.3201
ZL1TDR	Harding, B. D., 5 Dallas Place, New Windsor, Auckland.1207
ZL1TDS	Wright, M. E., 16 Puckey Avenue, Kaitaia.0500
ZL1TDT	Westland, R. E. K., 18 Townhead Crescent, Tauranga.3001
ZL1TDV	Penwarden, E. C., 13 Kupe Place, Tokoroa.2392
ZL1TDW	Bullough, E. G., 20 Coldham Crescent, Meadowbank, Auckland.1105
ZL1TDX	Turnball, G. R. H., 159 Bucklands Beach Road, Bucklands Beach.1704
ZL1TDY	Walker, H. E., 1/6a Boyd Avenue, Royal Oak, Auckland.1003
ZL1TDZ	Miller, C. J., 45 Bell Road, Remuera, Auckland.1105
ZL1TFB	Cooper, S. W., 41a Kelvin Road, Papakura.1703
ZL1TFC	Godfrey, J. P., 15 Crompton Road, Massey, Auckland.1208
ZL1TFD	Iversen, R. J., 1/3 Akehurst Avenue, New Lynn, Auckland.1207
ZL1TFE	Carter, P. R., P.O. Box 51-193, Pakuranga, Auckland.1730
ZL1TFF	Dreadon, A. H., 40 Woodward Street, Woodbourne.7354
ZL1TFG	Ballantyne, D. L., Bush Road, Albany, Auckland.1310
ZL1TFH	Swift, D. M., 42 Sherwood Road, Onerahi, Whangarei.0101
ZL1TFI	Needham, G. M., 4 Albatross Road, Red Beach, Auckland.1461
ZL1TFJ	Enerson, F. J. C., 20 Brookfield Terrace, Otumoetai, Tauranga.3001
ZL1TFK	Deverell, H. C., c/- 58 Ross Street, Onerahi, Whangarei.0101
ZL1TFL	Hawkes, R. G., 26 Penzance Road, Mairangi Bay, Auckland.1310
ZL1TFM	Sommerville, B. G., 44 Dickens Street, Grey Lynn, Auckland.1002
ZL1TFN	McCaughey, J. D., Te Whanapu Bay, Russell.0293

ZL1TFO	Baine, C. J., Main Road, Broadwood.0553
ZL1TFP	Purdy, R. G., 41 John Davis Road, Mt Roskill, Auckland.1004
ZL1TFQ	Portman, E. F., 6 New Brighton Road, Otahuhu, Auckland.1106
ZL1TFR	Taylor, R. I. H., 40 Ferndale Road, Mt. Wellington, Auckland.1106
ZL1TFS	Fitzpatrick, H., Lake Rotoma, R.D. 4, Rotorua.3221
ZL1TFV	White, P. R., 51 Cobham Drive, Morrinsville.2251
ZL1TFW	Savage, J., 151 Valley Road, Henderson, Auckland.1208
ZL1TFX	Rowe, R. A., 1 Summit Terrace, Hamilton.2001
ZL1TFY	Munyard, D.A., 40 Fitzwater Place, Henderson, Auckland.1208
ZL1TFZ	Sexton, G. J., Paparimu, R.D. 3, Papakura.1733
ZL1TGA	Haley, A. M. E., 30 Buckingham Crescent, Papatoetoe.1701
ZL1TGC	Henderson, V. N., 217 Glenfield Road, Glenfield, Auckland.1310
ZL1TGD	Topping, R. M., 268 River Road, Hamilton.2001
ZL1TGG	Soppit, T. R., 73 Astley Avenue, New Lynn, Auckland.1207
ZL1TGI	Collier, P. G., Department of Medicine, Medical School, Dunedin.9001
ZL1TGJ	Dick, G. W., 14 Ennis Avenue, Pakuranga.1706
ZL1TGK	Caulfield, R. E., 58 Redhills Road, R.D. 1, Henderson.1231
ZL1TGL	Burnnand, T. T., 19 Sylvia Road, St. Heliers Bay, Auckland.1105
ZL1TGM	Nicholson, R. D., 49 Pilkington Road, Panmure, Auckland.1106
ZL1TGN	Lindop, P. R., 24 Borrowdace Avenue, Howick, Auckland.1705
ZL1TGO	Johnstone, C. K., Butchers Bridge Road, Waiuku.1852
ZL1TGP	Bielby, R. K., 4 Bennett Road, Pakuranga.1706
ZL1TGQ	Shackleton, E. G., 5 Masfen Terrace, Kaitaia.0500
ZL1TGR	Hoole, G. L., 111 Buckland Street, Putaruru.2371
ZL1TGS	Smith, J. M., 25 Darren Crescent, Bucklands Beach.1704
ZL1TGT	Bain, S. G., 3 Grassy Downs Place, Hamilton.2001
ZL1TGU	Mead, A. D., 2 Te Puia Street, Kamo, Whangarei.0101
ZL1TGV	Holmes, B. S., Coast Road, R.D. 3, Waiuku.1852
ZL1TGW	Watson, E. H. C., Eastbank Road, Thornton, R.D. 3, Whakatane.3400
ZL1TGX	McNamara, A. E., 32 Galileo Street, Ngaruawahia.2171
ZL1TGY	Prank, A., 13 Riley Place, Fitzroy, Hamilton.2001
ZL1TGZ	Purvis, A. W., 25 Mataura Road, Waihi.2991
ZL1THA	Sleeman, D. W. W., 6 Rosebank Terrace, Stoke, Nelson.7001
ZL1THB	Phayer, C., 4 Korimako Place, Tokoroa.2392
ZL1THC	Buxton, R. J., 78 Maeroa Road, Hamilton.2001
ZL1THD	Turner, R. W., 17 Hetet Street, Te Kuiti.2500
ZL1THE	Fletcher, D. O., 24 Guy Road, Kaikohe.0400
ZL1THG	Bevan, T. M., 3 Glendale Drive, Hamilton.2001
ZL1THJ	Paul, R. E., 8 Quebec Road, Milford, Auckland.1310
ZL1THK	Russell, J. A., 60 Orakei Road, Remuera, Auckland.1105
ZL1THL	Piper, G. L., 16 Samuel Place, Hamilton.2001
ZL1THM	Kermode, W. R., 4 Harmony Avenue, Otahuhu, Auckland.1106
ZL1THN	Crozier, D. K., 154 Grey Street, Onehunga, Auckland.1106
ZL1THO	McNeil, D. R., 33 Eivers Road, Whakatane.3400
ZL1THP	Martin, F. B., 223 Bellevue Road, Tauranga.3001
ZL1THQ	Tunnicliffe, G. O. L. J., 9 School Road, Ngongotaha.3202
ZL1THR	Lawson, D. W., 906 Three Kings Road, Three Kings, Auckland.1004
ZL1THS	Rosborough, J. A., 3 Hinemoa Street, Waihi Beach.2990
ZL1THT	Smith, A. B., 58 Rodney Street, Hamilton.2001
ZL1THU	Cooke-Willis, S. O., 15 Madras Street, Khandallah, Wellington.6004
ZL1THV	Crawford, H. K., 42 Forest Lake Road, Hamilton.2001
ZL1THW	Thwaites, I. G., 28 Golf Road, New Lynn, Auckland.1207
ZL1THY	Dennis, G. A., 20 Red Hill Road, Papakura.1703
ZL1THZ	Parkinson, C. R., 2/5 Paris Place, Birkenhead, Auckland.1310
ZL1TIA	Dingley, D. G., 2139 Great North Road, Avondale, Auckland.1207
ZL1TIB	Beaumont, G. S., 6 Keyte Street, Whangarei.0101
ZL1TIC	Burgess, A. B., 4 Killarney Street, Te Puke.3071
ZL1TIE	Brewis, J., Mair Park, Caravan Park, Whangarei.0101
ZL1TIF	Callaghan, P. J., 5 Levesque Street, Birkdale, Auckland.1310
ZL1TIG	Palmer, L. H., 10 Puketapu Crescent, Taumarunui.2600
ZL1TII	O'Brien, K. M. J., 10 Murray Place, Lincoln.8152
ZL1TIJ	Alley, W. J., 10 Kahotea Place, Motuoapa., P.O.Box 59, Turangi.3371
ZL1TIK	Mowry, L. E., 25 Warwick Place, Brookfield, Tauranga.3001
ZL1TIL	Clarke, W. D., 21 Fruitvale Road, New Lynn, Auckland.1207
ZL1TIM	Stead, J. E., 41 Norton Street, Kopuru.0356
ZL1TIN	Taylor, K. L., 7 Poihaere Street, Turangi.3371

ZL1TIO	Bowers, S., 21 Hingaia Street, Turangi.3371
ZL1TIP	Hickson, D. L., 41 Kururau Road, Taumarunui.2600
ZL1TIQ	Watson, J. R., 19 Tania Place, Blockhouse Bay, Auckland.1207
ZL1TIR	MacLardy, W. J., South Highway, Whitianga.2856
ZL1TIS	Wadham, D. R. A., 889 Whangaparaoa Road, Whangaparaoa.1463
ZL1TIU	Parker, D. W., 99 Balmoral Road, Mt. Eden, Auckland.1004
ZL1TIV	Husband, D. T., 9 Mariana Place, Glen Eden, Auckland.1207
ZL1TIW	Doherty, S., 4 Springside Place, New Lynn, Auckland.1207
ZL1TIX	Harris, K., Inlet Road, Kerikeri.0452
ZL1TIZ	Gordon, M. B., 34 Pallant Street, Manurewa.1702
ZL1TJA	Powell, A. T., P.O.Box 5199, Frankton.2031
ZL1TJB	Watt-Wyness, S. C., 1 Wynsfield Garden, St. Heliers, Auckland.1105
ZL1TJC	Phayer, J., 4 Korimako Place, Tokoroa.2392
ZL1TJD	Lambourn, D., 106 Bassett Road, Remuera, Auckland.1105
ZL1TJE	Richardson, W. A., 4 Redcrest Avenue, Papakura, Auckland.1703
ZL1TJF	Fraknovary, G. A., 10 Canberra Avenue, Lynfield, Auckland.1004
ZL1TJG	French, T. G., 13 Bannerman Road, Auckland.1002
ZL1TJH	Gyde, G. N., C/- Police Station, Hamilton.2020
ZL1TJI	Batkin, D. B., Batkin Road, R.D. 4, Papakura.1733
ZL1TJJ	Dennis, J. M., 18 Castaing Crescent, Te Atatu South, Auckland.1208
ZL1TJK	Munden, A. J., House 8, Kinleith, Tokoroa.2392
ZL1TJL	Logue, J. F., No. 7 Braggs Avenue, Taumarunui.2600
ZL1TJM	McPherson, G. J., 49 Heybridge Street, Manurewa.1702
ZL1TJN	Simmonds, H. J.(Rev), 9 Riverpark Crescent, Henderson, Auckland.1208
ZL1TJP	Staynes, C. J., 115 Edlington Road, Dunedin.9001
ZL1TJQ	King, K. G., 227 St Heliers Bay Road, St Heliers, Auckland.1105
ZL1TJR	Trickett, N. D., 42 Riddell Road, Glendowie, Auckland.1105
ZL1TJS	McWilliams, D. J., 54 Allenby Road, Papatoetoe.1701
ZL1TJT	Manning, A. R., R.D.5, Te Mawhai, Te Awamutu.2400
ZL1TJU	Dawson, D. H., 11 Sanctuary Point, Pakuranga.1706
ZL1TJX	Black, C. W., 91 Tiverton Road, Avondale, Auckland.1207
ZL1TJY	Hall, P. J., 8 Milton Road, Mt Eden, Auckland.1003
ZL1TKA	Hindmarsh, R. J., 78 Kelvin Road, Papakura.1703
ZL1TKB	Shaw, A. G., 25 Blackburn Street, Hamilton.2001
ZL1TKC	Pointon, G. V., 6 Hoheria Road, Onehunga, Auckland.1106
ZL1TKE	Clark, D. W., 29 Puriri Road, Whenuapai Village.1450
ZL1TKF	Treadaway, R. E., 15a Impala Place, Royal Oak, Auckland.1106
ZL1TKG	Talbot, V. G., 93a Pembroke Street, Hamilton.2001
ZL1TKH	Leys, S. W., 42 Marlborough Street, Mt Eden, Auckland.1003
ZL1TKJ	Robinson, C. S., 80 Panapa Drive, Meadowbank, Auckland.1105
ZL1TKK	Murphy, B. R., 13 John Dee Crescent, Whangaparaoa.1463
ZL1TKL	Meads, D. R., 78 Hillcrest Road, Whakatane.3400
ZL1TKN	Baylis, M. R., 1 Munro Street, Whangarei.0101
ZL1TKO	Graves, C. E., 11 Casuarina Road, Bucklands Beach.1704
ZL1TKP	Gibson, J. W., Braemar Road, R.D. 2, Whakatane.3400
ZL1TKQ	Duncan, R. G., P.O.Box 11 040, Ellerslie, Auckland.1131
ZL1TKR	Foster, B. E., 30 Moresby Avenue, Waihi.2991
ZL1TKS	Duncan, A. K., 26 Ngaio Road, Kelburn, Wellington.6005
ZL1TKT	Pearson, F. W., 22b James Street, Whakatane.3400
ZL1TKU	Hilliar, D. J., 13 Chipping Dale, Mangere Bridge, Auckland.1701
ZL1TKW	Bodman, K. I., 21 Bernard Street, Hamilton.2001
ZL1TKX	Greensmith, A. S., Maddrens Road, Marua, R.D. 1, Hikurangi.0251
ZL1TKZ	Kleyburg, A., 20 Anderson Road, Hamilton.2001
ZL1TLA	Koolen, J. F. L., 32 Kings Road, Panmure, Auckland.1106
ZL1TLC	May, A. P., 56 Lantana Road, Green Bay, Auckland.1207
ZL1TLD	Walker, W. D., 44 Kawa Street, Otorohanga.2554
ZL1TLE	Millett, M. J., B739 Railway Settlement, Hinuera.2050
ZL1TLF	Cadness, R. H., 109 Glamorgan Drive, Torbay, Auckland.1310
ZL1TLG	Williams, I. G., Drury Hills Road, R.D. 1, Drury.1752
ZL1TLI	Craig, N. A., 11 Brunton Crescent, P.O. Box 496, Thames.2800
ZL1TLJ	Rumble, G. O., 2/10 Himalaya Crescent, Lynfield, Auckland.1004
ZL1TLK	McConnachie, M. E., 117 Caledonian Road, St Albans, Christchurch.8001
ZL1TLL	Moral, J., 78 Queen Street, Te Kuiti.2500
ZL1TLM	Berends, J. M., 66a Bradbury Road, Howick, Auckland.1705
ZL1TLN	Onrust, F., 37a Sylvia Road, St. Heliers, Auckland.1105
ZL1TLP	Yerex, B. S., 24 High Street, Rotorua.3201
ZL1TLQ	McMillan, D. J., 4 Inaka Place, Matamata.2271
ZL1TLR	Walton, R. W., Artillery Road, R.D.2, Manugaturoto.0272
ZL1TLU	Waterhouse, D. C., 29a Puriri Park Road, Whangarei.0101
ZL1TLV	Oxner, E. A., Mossop Road, R.D. 1, Tokoroa.2392
ZL1TLX	Drake, M. J., 174 Point View Drive, R.D., Papatoetoe.1701
ZL1TLY	Gregory, K. E., 25 Belfast Street, Hillsborough, Auckland.1004
ZL1TMA	Appleyard, B. H., 13 Mole Street, Greytown.5953
ZL1TMB	McDonald, B. D., 7 Oriana Avenue, Mt. Roskill, Auckland.1004
ZL1TMD	Meyer, T. R., 12 Honeysuckle Lane, Mairangi Bay.1310
ZL1TME	Schwarz, M. W., Bayly Road, Tirau.2372
ZL1TMF	Ralston, W. B., 168 Cambridge Road, Tauranga.3001
ZL1TMG	Greenfield, R. S. T., 33 Tui Crescent, Maunu, Whangarei.0101
ZL1TMI	Moseley, S. F., 34 Domain Street, Waiuku.1852
ZL1TMJ	Rowlands, C. M., 68 Raurimu Avenue, Onerahi, Whangarei.0101
ZL1TMK	Krause, R. E., 7 Gordon Street, Kawerau.3452
ZL1TMM	Brooker, A. S., 290 Park Road, Te Awamutu.2400
ZL1TMO	Lawry, M. G., Waitaha Road, Welcome Bay, R.D.5, Tauranga.3021
ZL1TMP	Lovatt, R. A., 23a Janet Place, Rotorua.3201
ZL1TMQ	McCarthy, J. W., 22 Higgins Road, Hamilton.2001
ZL1TMR	Alderson, R. I., 2/19a Batkin Road, Avondale, Auckland.1207
ZL1TMS	Watson, C. D., Eastbank Road, R.D. 3, Whakatane.3400
ZL1TMT	Haywood, J. R., 22 Buscombe Road, Henderson, Auckland.1208
ZL1TMU	Smith, G. R., 10 Killington Crescent, Mangere, Auckland.1701
ZL1TMV	Wilkinson, C., 35/139 Greys Avenue, Auckland.1001
ZL1TMW	Shuker, M. L., 18 Mason Avenue, Pukekohe.1800
ZL1TMZ	Nice, K. S., 11 Janet Street, Pakuranga.1706
ZL1TNA	Kivell, G. J., Crosier Street, Pirongia, Te Awamutu.2450
ZL1TNB	Davies, D. G., Wealtha Dorm., Church College, Temple View.2030
ZL1TNC	Hampshire, K. R., 13 Moana Place, Morrinsville.2251
ZL1TND	Probine, D. C., 46 Ward Street, Taumarunui.2600
ZL1TNE	Edwards, W. D., 21 Grey Street, Hamilton.2001
ZL1TNF	Ruediger, J., 153 Totara Drive, Hamilton.2001
ZL1TNG	Cron, B. E., 71 Wellington Street, Hamilton.2001
ZL1TNI	Belding, J. C., 20 Surville Place, Mairangi Bay, Auckland.1310
ZL1TNK	Davis, A. G., 3 Fred Judd Crescent, Whakatane.3400
ZL1TNL	Binney, H. M., 43 Barrier View Road, Leigh.1490
ZL1TNM	Beard, K. M., Arawhata Road, Kaingaroa.3271
ZL1TNN	Hansen, G. W., 133a Paramount Parade, Tikipunga, Whangarei.0101
ZL1TNO	O'Loan, T. J., 16 Grosvenor Street, Cambridge.2351
ZL1TNQ	Talbot, A. M.(Mrs), 64 Woodlands Crescent, Browns Bay, Auckland.1310
ZL1TNR	Bielby, F. L., 17 Old North Road, Orewa.1461
ZL1TNT	Maginnity, D. N., 16 Ebony Street, Christchurch.8005
ZL1TNV	Shanks, A. J., 39 Marellen Drive, Red Beach, Orewa.1461
ZL1TNW	Smith, K. W., 40 Topliss Drive, Torbay, Auckland.1310
ZL1TNX	Chappell, P. J., Eastern Budget Motel, 416 Devon Street East, New Plymouth.4601
ZL1TNY	Quedley, F. J., 16 Woodhall Road, Epsom, Auckland.1003
ZL1TNZ	Rowe, M. J., 28 Tweed Street, Mt Maunganui.3002
ZL1TOB	Crawford, J. V., Communications Squadron, RNZAF Base Auckland, Post Office, Whenuapai.1450
ZL1TOD	McAuliffe, K., 50 Humber Crescent, Tauranga.3001
ZL1TOE	Pennell, A. E., Belk Road, R.D. 1, Tauranga.3021
ZL1TOF	Baker, G. S., 3/106 Celtic Crescent, Ellerslie, Auckland.1105
ZL1TOG	Taylor, L. R., 805 Riddell Road, St Heliers, Auckland.1105
ZL1TOH	Dale, B. H., 22 Mitchell Street, Tauranga.3001
ZL1TOL	Anderson, M. G., 42 Boakes Road, Mt. Wellington, Auckland.1106
ZL1TOO	Walker, R. M., 50 Raleigh Street, Cambridge.2351
ZL1TOP	Foster, M., Lone Kauri Road, Karekare, R.D., Piha, Auckland.1450
ZL1TOQ	Ashton, I. M., 7 Cunliffe Place, Glenfield, Auckland.1310
ZL1TOR	Adams, N. J., Matangi Road, R.D.4, Hamilton.2021
ZL1TOS	Ewens, B. S., 7 Marie Avenue, Red Beach, Orewa.1461
ZL1TOT	Sim, P. T., Bycroft Road, R.D.2, Drury.1752
ZL1TOU	Lowe, J., 51 Epsom Avenue, Epsom, Auckland.1003
ZL1TOW	Orr, W. B., 1c Rostrevor Avenue, Epsom, Auckland.1003
ZL1TOX	Stevenson, J. F. G., 20 Kirrie Avenue, Te Atatu South, Auckland.1208
ZL1TOY	McGilp, F. C., 6a Lilian Place, Pakuranga.1706
ZL1TOZ	Kennedy, R. M., North Road, R.D. 1, Clevedon.1751
ZL1TPB	Brooks, R. K., 391 Ellerslie-Panmure Highway, Panmure, Auckland.1106
ZL1TPC	Gutschlag, B. P., 2/143a Manuka Road, Glenfield, Auckland.1310

ZL1TPD Downs, G. M., 6 Glen Road, Henderson, Auckland.1208
ZL1TPE McEwen, D. J., 9 Roby Street, Te Atatu North, Auckland.1208
ZL1TPF Humphrey, J. M., 115 17th Avenue, Tauranga.3001
ZL1TPG van Loon, Q. J. M., 30 Sturges Road, Henderson, Auckland.1208
ZL1TPH Hayman, S. R., Wainui Road, Silverdale, Auckland.1462
ZL1TPI Smirk, A. T., 10 Masons Avenue, Herne Bay, Auckland.1002
ZL1TPJ Walker, B. J., Crane Road, R.D. 5, Hikurangi.0251
ZL1TPM Medland, J. C., 12 Arawa Street, Hamilton.2001
ZL1TPN Nielsen, R. P., 18 Oban Road, Tauranga.3001
ZL1TPO Vos, P. M., 4 Durham Street, Te Atatu North, Auckland.1208
ZL1TPP Locke, S. D., see ZL7TPP.
ZL1TPQ Richardson, W. J., 57 Esk Street, Tauranga.3001
ZL1TPS Bryant, R. S., 44a Pleasant Road, Glen Eden, Auckland.1207
ZL1TPT Reid, K. S., 38 Willis Road, Papakura.1703
ZL1TPV Cameron, A. K., 24 Buick Crescent, Palmerston North.5301
ZL1TPX Manning, B. F., 16 Clive Road, Kati Kati.3051
ZL1TPZ Beard, M. C., Arawhata Road, Kaingaroa.3271
ZL1TQA Coakley, A. H., 23 Butler Road, Kerikeri.0452
ZL1TQB Lake, A. R., 10 Rewarewa Place, Matua, Tauranga.3001
ZL1TQC Tarlton, I. H., 8 North Road, Kaitaia.0500
ZL1TQD Dil, W. T., 2/12 Rugby Road, Birkenhead, Auckland.1310
ZL1TQE Palmer, G. M., 71 West Street, Pukekohe.1800
ZL1TQF Webster, E. T., 40 McIntyre Road, Mangere Bridge, Auckland.1701
ZL1TQH Whittaker, V. W., 17 Princess Road, Tauranga.3001
ZL1TQI Reed, G. N., 1 Church Bay Road, Oneroa, Waiheke Island.1470
ZL1TQK Earl, S. C., 156 Taupo Road, Taumarunui.2651
ZL1TQM Joseph, D. H., 38 Sunnybrae Road, Glenfield, Auckland.1310
ZL1TQN Woodward, N. F., Rangiuru Road, R.D.8, Te Puke.3071
ZL1TQP Christensen, C. M., 82 Donald Road, Kaitaia.0500
ZL1TQQ Hobday, D. S., 12 Onedin Place, Titirangi, Auckland.1207
ZL1TQR Kennedy, I. R., 36 Montclair Rise, Browns Bay, Auckland.1310
ZL1TQT Reid, J. D., 15 Dunbar Place, Tokoroa.2392
ZL1TQV McLeod, D., 81 Kayes Road, Pukekohe.1800
ZL1TQW O'Keefe, R. A., 8 Raetihi Crescent, Mt. Albert, Auckland.1003
ZL1TQX Bott, J. C. (Mrs), Woodstock Avenue, Mackaytown, via Paeroa P.O. Box 28.2951
ZL1TQY Watson, M. A. V., Poihipi Road, R.D. 1, Taupo.3300
ZL1TQZ Rowe, I. S., 39 Studfall Street, Pakuranga, Auckland.1706
ZL1TRA Cox, R. O., 190 Old Wairoa Road, Papakura.1703
ZL1TRC Hardwick, D. E., 66 Norrie Street, Melville, Hamilton.2001
ZL1TRD Tyson, T. W., Hikamutu, Taumarunui.2600
ZL1TRE Shepherd, M. B., 19 Tisdall Crescent, St Johns, Auckland.1105
ZL1TRF De Wit, R., 1 Pegasus Drive, Rotorua.3201
ZL1TRH Walker, A. V.(Mrs), 51 Caronia Crescent, Mt. Roskill, Auckland.1004
ZL1TRJ Macaskill, S. L., 167 Waimumu Road, Massey, Auckland.1208
ZL1TRK Cook, D. M., 27a Anzac Road, Whangarei.0101
ZL1TRL Huljich, A. P., 137 Totara Road, Whenuapai.1450
ZL1TRM Bulte, L. W., Park Road, R.D.3, Waiuku.1852
ZL1TRN Doughty, C. A., Brookley Road, Manurewa, Auckland.1702
ZL1TRO Schulz, P. M., 37 Croall Crescent, Hamilton.2001
ZL1TRP Dodds, D. J., Rangikapiti Road, Coopers Beach.0557
ZL1TRQ Hutton, L. D., 118 Aberdeen Drive, Dinsdale, Hamilton.2001
ZL1TRR Morrow, I. E., Nikau Road, R.D. 2, Pokeno.1872
ZL1TRS Shafe, T. P. G., 19 Scott Road, Stanmore Bay, Whangaparaoa.1463
ZL1TRV Huljich, P. A., 137 Totara Road, Whenuapai.1450
ZL1TRX Wilson, J. P., 10 Brian Avenue, Milford, Auckland.1309
ZL1TRY Keatinge, A. R., 8 Bernard Street, Matamata.2271
ZL1TRZ Martens, P. H., 300 Pukehina Parade, R.D. 9, Te Puke.3071
ZL1TSE Abernethy, C.(Mrs), 20 Zetland Terrace, Kelburn, Wellington.6005
ZL1TSF Fish, A. P., 9 Seaview Terrace, Mt. Albert, Auckland.1003
ZL1TSG Burrows, J. P., 7 Marotiri Drive, Ruakaka.0253
ZL1TSH Perenara, M. H., 10 Amokura Place, Whakatane.3400
ZL1TSI Edlin, W. F., 13 Halberg Street, Papakura, Auckland.1703
ZL1TSJ Cope, G. B., 1c Bathurst Street, Mt Eden.1004
ZL1TSK Ladyman, D. R., 25 Carlton Street, Te Aroha.2971
ZL1TSL Darvill, K. J., 38 Caen Road, Panmure, Auckland.1106
ZL1TSM Garnett-Frizelle, H. H., 144b Nixon Street, Hamilton.2001
ZL1TSN Hollis, M. A., 98 The Drive, Epsom, Auckland.1003
ZL1TSO Soysa, S. W., 129 Portland Road, Remuera, Auckland.1105
ZL1TSS Armstrong, R.C.A., 142 King Street, Cambridge.2351
ZL1TST Young, J. R., 14 Childs Avenue, Pukekohe.1800
ZL1TSU Osborne, P. L., 14 Oakfield Crescent, Hamilton.2001
ZL1TSV Talbot, I. C., 64 Woodlands Crescent, Browns Bay, Auckland.1310
ZL1TSY Law, J. A., 43 South Lynn Road, Titirangi, Auckland.1207
ZL1TTA Fairweather, K. D., 81 Kenmoore Street, Newlands, Wellington.6004
ZL1TTB Wevers, W. F., 22 Dignan Street, Pt Chevalier, Auckland.1002
ZL1TTD Downard, I. F., 252 Malfroy Road, Rotorua.3201
ZL1TTE Cooke, D. C., 13 Walmer Road, Pt. Chevalier, Auckland.1002
ZL1TTG Lethbridge, B. R., Ward Drive, Opua.0290
ZL1TTH Dooley, B. J., c/- 125 Meeanee Road, Taradale.4001
ZL1TTI Hunter, R. A., 13 Datura Place, Sunnynook, Auckland.1310
ZL1TTK Nettleingham, J., Matahui Road, Katikati.3051
ZL1TTL Bryan, M. D., 16 Dalwhinnie Parade, Howick.1705
ZL1TTN Goffin, C. P., c/- YMCA, 54 Moray Place, Dunedin.9001
ZL1TTO Curran, W. J., Awaiti Road, Paeroa.2951
ZL1TTP Stagpoole, V. M., c/- 49 Bould Street, Johnsonville, Wellington.6004
ZL1TTS Karrasch, D. F., 24 Brooks Road, Papakura.1703
ZL1TTU Godbert, F. D., Waipapa West Road, R.D. 2, Kerikeri.0452
ZL1TTV Mather, P. B., 56 West Harbour Terrace, Massey, Auckland.1208
ZL1TTX Moss, G. D., 1/62 Sorrel Crescent, Bucklands Beach.1704
ZL1TTY Vujcich, L. M. G., 12 Maida Vale, Manurewa, Auckland.1702
ZL1TTZ Broad, A. L. E., Northwood Avenue, R.D. 4, Kaitaia.0500
ZL1TUA Miller, K. I., 134 College Road, Edgecumbe.3451
ZL1TUB Borman, T. G., 3 Manuka Street, Hamilton.2001
ZL1TUC Cuthbert, E. W., 12 Kitenui Avenue, Mt. Albert, Auckland.1003
ZL1TUD Graham, D. W., 11 Galbraith Street, Rotorua.3201
ZL1TUE Robinson, G. M., 1/20 Shoreham Street, Blockhouse Bay, Auckland.1207
ZL1TUG Trevena, A. R., 7 Lawrence Street, Tauranga.3001
ZL1TUH Addis, B. G., 119 Motatau Road, Papatoetoe, Auckland.1701
ZL1TUI Hannam, T. M., 44 Greenacres Drive, Kawakawa.0291
ZL1TUJ Marr, G. E., 11 Liley Place, Remuera, Auckland.1105
ZL1TUK Aymes, N. C., Mountain View Road, Otorohanga.2554
ZL1TUL Richardson, R. W., 3 McKenzie Avenue, Otorohanga.2554
ZL1TUM Stewart, K. R., 52 Jervis Street, Rotorua.3201
ZL1TUN Fendley, D. R., 24 Seaview Road, Tauranga.3001
ZL1TUO Hope, G. L., Terena Street, Mamaku, Rotorua.3250
ZL1TUQ Campkin, A. D., 11 Lyford Crescent, Forrest Hill, Auckland.1310
ZL1TUS Watson, D. C., Eastbank Road, Thornton, R.D. 3, Whakatane.3400
ZL1TUT Alexander, S. J., Waihou Valley, R.D. 3, Okaihau.0455
ZL1TUV King, A. P., Drury Hills Road, Drury, Auckland1752
ZL1TUW Lindquist, I. D., 4 Martin Place, Panmure, Auckland.1106
ZL1TUX Raffles, G. E. H., 34 Dundee Place, Blockhouse Bay, Auckland.1207
ZL1TUY Young, R. A., 2 Margan Place, Papakura, Auckland.1703
ZL1TUZ Quirk, L., 41 Castleford Street, Green Bay, Auckland.1207
ZL1TVA Richardson, R. D., C/- Sergeants Mess, RNZAF Base, Wigram, Christchurch.8004
ZL1TVB Johnston, T. P., P.O.Box 32-041, Devonport.1330
ZL1TVE Willis, D. R., P.O. Box 10, Rawene.0473
ZL1TVG Hynes, J. K., 35 Central Avenue, Whangarei.0101
ZL1TVH Simpson, S. W., 20 Westholm Way, Papakura.1703
ZL1TVI Allan, R. W., c/- W. W. Allan, R.D.5, Te Awamutu.2400
ZL1TVJ Ross, M. O., R.D. 1, Katikati.3051
ZL1TVM Eades, M. G., 20 Keywyn Road, Kelston, Auckland.1207
ZL1TVO Sylvester, R. L., 19 Ringwood Street, Torbay, Auckland.1310
ZL1TVP Aikin, P. M., 179 Hokianga Road, Dargaville.0300
ZL1TVQ Boyce, K. R., 33 Lambeth Road, Mt. Roskill, Auckland.1004
ZL1TVR Odell, A. L., 22 Howard Road, Northcote, Auckland.1309
ZL1TVS Odell, A. E., 22 Howard Road, Northcote, Auckland.1309
ZL1TVU Badraun, G. F., Booeye Bay, R.D.1, Russell.0293
ZL1TVW Shipman, M. T., 10 Scanlan Street, Grey Lynn, Auckland.1002
ZL1TVX Coburn, C. L., 105 Tihi Road, Rotorua.3201
ZL1TVY Parr, M. I., 88 Redhill Road, Papakura.1703
ZL1TVZ Bartle, D. L., 13b Seymour Road, Henderson, Auckland.1208
ZL1TWA Northcote, J. A., Kie Kie Road, Aria.2551
ZL1TWB Wills, T. J. E., 112 Ngamotu Road, New Plymouth.4601
ZL1TWC Rowe, N. L., 28 Tweed Street, Mt Maunganui.3002
ZL1TWD Sparkes, D. G., 17 Mamaku Street, Paraparaumu.6152
ZL1TWE Norris, D. R. H., 14 Manning Street, Hamilton., P.O.Box 19087, Hamilton.2000

ZL1TWF	Brown, C. J. I., 35 Lancaster Street, Hamilton.2001
ZL1TWG	Moseley, S. R., 34 Domain Street, Waiuku.1852
ZL1TWH	Zein, D. B., 22 Stafford Place, Tokoroa.2392
ZL1TWI	Lydiate, K., 52 Fitzwater Place, Henderson, Auckland.1208
ZL1TWJ	Ross, E. J. A., 74 Kumlin Avenue, Tauranga.3001
ZL1TWK	Schafer, M. T. E., 10 Canterbury Place, Parnell, Auckland.1001
ZL1TWM	Rhodes, R. W., 45 Rangeview Road, Henderson, Auckland.1208
ZL1TWN	Ching, Chen-Bon, R., 101 Litten Road, Howick, Auckland.1705
ZL1TWP	Stoney, D. B., Alpine Road, R.D.4, Warkworth.1492
ZL1TWQ	Hall, M. J., Norfolk Avenue, Reotahi, Whangarei.0121
ZL1TWR	Palmer, S. D., 71 West Street, Pukekohe.1800
ZL1TWS	Kolf, P. A. J., c/- P. Carter, R.D.2, Featherston.5952
ZL1TWT	Broughton, P. Y., Kaimaumau, Waiharara, R.D., Kaitaia.0500
ZL1TWU	Pullar, G. R., 11 Wainone Place, Warkworth.1492
ZL1TWV	Cleave, V. J., 75 Taunton Terrace, Blockhouse Bay, Auckland.1207
ZL1TWX	McFadzean, P. A., 40 Hain Avenue, Mangere East.1701
ZL1TWY	Woollett, S. C., 360b Blockhouse Bay Road, Blockhouse Bay, Auckland.1207
ZL1TWZ	Russell, G. C., 21 Highland Avenue, Titirangi, Auckland.1207
ZL1TXA	Johnston, P. K., 1/205 Valley Road, Mt Maunganui.3030
ZL1TXB	Fredericksen, K. P., 108 Moana Avenue, Tahunanui, Nelson.7001
ZL1TXC	Perston, J. M., 37 Grey Street, Kawerau.3452
ZL1TXD	Prince, R. E., 2/188 Clovelly Road, Bucklands Beach, Auckland.1704
ZL1TXF	Lake, J. S., 17 Glynnbrooke Street, Te Atatu South, Auckland.1208
ZL1TXH	Schultz, W., Schultz Road, R.D. 2, Waipu.0254
ZL1TXI	Culloty-Marsh, D. L., 5 May Street, Hamilton.2001
ZL1TXK	Burdon, R. W., Flat C, 5 Hospital Road, Blenheim.7301
ZL1TXL	Heywood, E. J., 1/9 Kepler Place, Manukau Heights, Manukau.1701
ZL1TXM	Dexter, J. D. G., 43 Owens Road, Epsom, Auckland.1003
ZL1TXN	Vickery, W.L., 38 Links Road, New Lynn, Auckland.1207
ZL1TXO	Dawson, R. N., 3 Wainone Place, Warkworth.1492
ZL1TXP	Schultz, P. O., Schultz Road, R.D. 2, Waipu.0254
ZL1TXQ	Rowe, A. N., 24 Okareka Place, Pakuranga.1706
ZL1TXR	Bouius, D. G., 60a King George Avenue, Epsom, Auckland.1003
ZL1TXS	Nield, I. J., 4a Belgium Terrace, Gisborne.3801
ZL1TXT	Nicholson, C., 2/467 Great South Road, Penrose, Auckland.1105
ZL1TXU	Cook, D. G., 18 Coventry Road, Hamilton.2001
ZL1TXV	Byrnand, J. A., 10 Church Street, Onerahi, Whangarei.0101
ZL1TXW	Brown, K. I., 2 Fitzherbert Avenue, West Harbour, Auckland.1208
ZL1TXX	Kelly, D. B., 12 Somerset Grove, Tauranga.3001
ZL1TXY	Kitching, J. C. H., R.D.1, Howick.1731
ZL1TXZ	Boot, I. O. G., 204 Campbell Road, Greenlane, Auckland.1105
ZL1TYA	Carline, I. A., 38 Kings Road, Panmure, Auckland.1106
ZL1TYB	Atkinson, G. F., 10 Kohe Kohe Street, Kelston, Auckland.1207
ZL1TYD	Hill, A. C., 43 South Lynn Road, Titirangi, Auckland.1207
ZL1TYE	Brien, G. J., 33 Rosalind Road, Glenfield, Auckland.1310
ZL1TYF	Towler, T. J., P.O.Box 27 244, Upper Willis Street, Wellington.6037
ZL1TYG	Millen, T. A., 50 Barry Road, Waihi.2991
ZL1TYH	Burrell, C. J., 78 Lewis Street, Hamilton.2001
ZL1TYI	Bridger, G. D., 102 Hospital Road, Whangarei.0101
ZL1TYJ	Ball, R. J., R.D. 1, Turangi.3371
ZL1TYL	Taylor, P. J., 14 Gollan Road, Mt. Wellington, Auckland.1106
ZL1TYM	Tuck, P. J., 4 Emily Way, Karori.6005
ZL1TYN	Dunlop, B. V., Unit 1, 239 Robertson Road, Mangere, Manukau City.1701
ZL1TYO	Fletcher, S. J., 32 Garden Heights Avenue, Glenview, Hamilton.2001
ZL1TYP	Thompson, G. O., 197 St Aubyn Street, New Plymouth.4601
ZL1TYQ	Sadler, J., 35 Patterson Street, Mt. Maunganui.3002
ZL1TYS	Rust, H., Florance Avenue, Russell.0293
ZL1TYT	Lowe, E. R., 86 Dinsdale Road, Hamilton.2001
ZL1TYV	Jenkins, M. W., 35 Robertson Street, Rotorua.3201
ZL1TYW	Middlemiss, G. D., Eureka Station Road, R.D. 4, Hamilton.2021
ZL1TYZ	Jenner, A. M., c/- Radio Depot, Dinsdale, Hamilton.2000
ZL1TZA	Jenner, R. P., P.O. Box 241, 94 Rawhiti Avenue, Matamata.2271
ZL1TZC	McConnochie, K. N., 10 Miro Street, Te Aroha.2971
ZL1TZD	Dodds, A. M., 18 Escalona Street, Kamo, Whangarei.0101
ZL1TZE	Davison, J. G., 19 Thompson Terrace, Manurewa.1702
ZL1TZF	Binns, N. L., 10 Denby Crescent, Tikipunga, Whangarei.0101
ZL1TZG	McKevitt, M. J., 12 Apanui Avenue, Whakatane.3400
ZL1TZH	Hunt, E. J., 19 Manchester Street, Dunedin.9001
ZL1TZI	Donaldson, G. D., 80 Woolfield Road, Papatoetoe, Auckland.1701
ZL1TZJ	Page, S. B., 717 East Coast Road, Browns Bay, Auckland.1310
ZL1TZK	Carter, R. H., 48 Cornwall Park Avenue, Epsom, Auckland.1003
ZL1TZL	Rowe, G. J., 73 Elizabeth Street, Rotorua.3201
ZL1TZN	Mott, P. W., 4/7 Domain Street, Devonport, Auckland.1309
ZL1TZP	Doell, S. D., 11 Sandspit Road, Waiuku.1852
ZL1TZQ	Morgan, K. C., 12/19 Verbena Road, Birkdale, Auckland.1310
ZL1TZS	Reeves, G. F., 329 East Coast Road, Mairangi Bay, Auckland.1310
ZL1TZU	Miller, R. T., Te Wahapu Road, P.O. Box 172, Russell.0293
ZL1TZV	Stockley, L. A. F., c/- 19 Fernglen Road, St Heliers, Auckland.1105
ZL1TZW	Shaw, J. E. M. (Mrs), C/- Post Office, Paerata.1450
ZL1TZX	Fryer, B. S., 38 Monarch Avenue, Glenfield, Auckland.1310
ZL1TZY	Noble, P. V., 22 Clagery Street, Sandringham, Auckland.1003
ZL1TZZ	Skinner, D. E., 75 Lynbrooke Avenue, New Lynn, Auckland.1207
ZL1UAB	Petrie, G. W., 70 Mansel Avenue, Hillcrest, Hamilton.2001
ZL1UAD	Blackwell, D. M., 16 Hawera Road, Kohimarama.1105
ZL1UAE	Eeninkwinkel, J., Lone Kauri Road, R.D. New Lynn, Auckland.1207
ZL1UAG	Tyson, J., 9 Tui Grove, Te Haumi, Paihia.0252
ZL1UAH	Dodds, M. L. E., Rangikapiti Road, Coopers Beach.0557
ZL1UAI	Cayton, M. L., 44 Selwyn Road, Rotorua.3201
ZL1UAJ	Thomson, J., 4 Cherry Road, Howick, Auckland.1705
ZL1UAK	Klarwill, R. G., 7b Lingarth Street, Remuera, Auckland.1105
ZL1UAL	Seales, P. J. M., "Ferndale", R.D.2, Broadwood, Northland.0553
ZL1UAM	Crook, S. A., 4 Kelly Street, Rotorua.3201
ZL1UAN	Ah-Chan, W. R., 61 Devon Street, Rotorua.3201
ZL1UAO	Coppard, E. T., 11 Christensen Street, Waihi.2991
ZL1UAP	Johnson, G. C., 49a Butley Drive, Pakuranga.1706
ZL1UAQ	Carter, S. B., 10 Henare Place, Rotorua.3201
ZL1UAR	Hishon, B. N., 39 Mears Road, Hamilton.2001
ZL1UAT	Sowman, M. D., 48 Maraetai Village, R.D. 1, Mangakino.2391
ZL1UAU	Clarke, K. B., 22 Farnborough Crescent, Mangere, Auckland.1701
ZL1UAV	Nobbs, N. A., 85a King Edward Avenue, Bayswater, Auckland.1309
ZL1UAW	Jansen, R. M., c/- J. A. Sinclair, 141 Woodham Road, Christchurch.8006
ZL1UAY	Brunner, J., 13 Huia Street, Oneroa, Waiheke Island.1470
ZL1UBA	Anderson, R. J.(Dr), 704 Mt Eden Road, Mt Eden, Auckland.1004
ZL1UBB	Gardiner, R. S. A., 48 Glenvar Road, Torbay, Auckland.1310
ZL1UBC	Bowring, A. E., 364 Thames Street, Morrinsville.2251
ZL1UBD	Fuller, N. M., 152 Awaruku Road, Torbay, Auckland.1310
ZL1UBE	Edwards, J. D., 147a Waipuna Road, Mt Wellington, Auckland.1106
ZL1UBG	Millar, R. C., 82 Mount View Drive, Rotorua.3201
ZL1UBH	Miller, R. N., 266 Whitaker Street, Te Aroha.2971
ZL1UBI	Smith, N. C., Youngsons Road, Whakamarama, R.D. 6, Tauranga.3021
ZL1UBJ	Findlay, D. K., Unit 2, 1 Burns Avenue, Takapuna, Auckland.1309
ZL1UBK	Brown, G. A., 16a Ocean Road, Ohope.3454
ZL1UBL	Falloon, G. A., 26 Glenshee Place, Highland Park, Pakuranga.1703
ZL1UBM	Willis, B. E., 195 Taharepa Road, Taupo.3300
ZL1UBP	Peryer, C. J., 66 Richard Farrell Avenue, Remuera, Auckland.1105
ZL1UBQ	Crossett, T. A., 18 Raihara Street, Kaikohe.0400
ZL1UBR	Stagg, C. D., 3 Mogridge Place, Springlands, Blenheim.7301
ZL1UBS	Watchman, S. J., 81 Main Street, Blenheim.7301
ZL1UBT	Sanne, G. T., 23 18th Avenue, Tauranga.3001
ZL1UBU	Apel, E. A. M., 82 Wharf Road, Ostend, Waiheke Island1470
ZL1UBV	Withers, P. G., 187 Morningside Road, Whangarei.0101
ZL1UBW	Libeau, F. L., 10 Asbury Crescent, Campbells Bay, Auckland.1310
ZL1UBX	Finer, G. A., 27 Divich Avenue, Te Atatu, Auckland.1208

ZL1UBY	Murphy, S. B., 14 Fallow Street, Browns Bay, Auckland.1310
ZL1UCA	Lang, R. G. C., 4 Goad Crescent, Hillsborough, Auckland.1004
ZL1UCB	Stewart, R. S., 87 Tirimoana Road, Te Atatu, Auckland.1208
ZL1UCC	Biezebroek, J., 13 Robin Lane, Browns Bay, Auckland.1310
ZL1UCE	Warner, P. J., 36 Harvey Street, Taupo.3300
ZL1UCG	Ferguson, I. A., 36 Stanley Point Road, Devonport, Auckland.1309
ZL1UCI	Pahl, E. W. T., 17 Landscape Road, Tauranga.3001
ZL1UCJ	Teviotdale, E. R. (Mrs), Fairbank Road, Rotorua.3201
ZL1UCK	Jane, T. R., Private Bag, Parakao Store, R.D.2, Whangarei.0121
ZL1UCM	Parr, R., Paterangi Road, Te Awamutu.2400
ZL1UCP	Morrison, J. B., 81 Woodward Street, Taupo.3300
ZL1UCR	Jopling, W. F., 7 Lancaster Road, Birkdale, Auckland.1310
ZL1UCS	Stubbing, M. P., 37 Vanessa Crescent, Glendowie, Auckland.1105
ZL1UCT	Taramoeroa, N. M., 11 Sydann Place, Kaitaia.0500
ZL1UCU	Wright, J. R.(Miss), 28 Chorley Avenue, Massey, Auckland.1208
ZL1UCW	Gravatt, B. P., 23 Boyce Avenue, Mt Roskill, Auckland.1004
ZL1UCX	Smith, K. L., 78 Pitt Street, Auckland.1001
ZL1UCY	Still, A. C., 44 Kennedy Road, Surfdale, Waiheke Island., P.O.Box 2842, Auckland.1000
ZL1UCZ	Tooke, B. H., R.D.2, Pahiatua.5471
ZL1UDA	Crompton, L. L., 130 Hone Heke Road, Kerikeri.0452
ZL1UDD	Mitchell, K. F., 3 Millen Place, Clarks Beach, South Auckland.1850
ZL1UDE	Morey, E. R., 35 Elmwood Crescent, Hamilton.2001
ZL1UDF	Streiff, D. R., 18 Anzac Avenue, Morrinsville.2251
ZL1UDG	Wells, G. G., 2nd Avenue, Waihou.2972
ZL1UDJ	Duffell, A. H., 8 Grassy Downs Place, St Andrews, Hamilton.2001
ZL1UDK	Marsh, L. A., Stringers Road, R.D. 1, Putaruru., P.O. Box 843, Tokoroa.2392
ZL1UDM	Stannard, E. A., Ngatira Road, Lichfield, R.D. 2, Putaruru.2371
ZL1UDN	Rowe, S. W., 57 Valentine Street, Papakura.1703
ZL1UDO	Sinclair, S. C., 40 Sumner Street, Rotorua.3201
ZL1UDP	McKain, M., 59b Knighton Road, Hillcrest, Hamilton.2001
ZL1UDQ	Rawlings, G. K., 10a Seymour Road, Henderson.1208
ZL1UDR	McDonnell, T. R., 2b Faith Bullock Place, New Lynn, Auckland.1207
ZL1UDS	Turton, G. J., 29 Centreway Road, Orewa.1461
ZL1UDT	McCorral-Smythe, E. G., 191 Wade River Road, Whangaparaoa.1463
ZL1UDU	Fletcher, O. D., 1/9 Lonsdale Crescent, Rongotai, Wellington.6003
ZL1UDV	Frogley, C. D., 22 Mellons Bay Road, Howick, Auckland.1705
ZL1UDW	Blackett, D. J., 56 Church Street, Northcote, Auckland.1309
ZL1UDY	Morgan, B. K., 62 Sunlands Drive, Manurewa, Auckland.1702
ZL1UDZ	Greenman, P. M., 43a Wheturangi Road, One Tree Hill, Auckland.1105
ZL1UEA	Woods, D. I., 23 Omokoroa Road, Omokoroa.3050
ZL1UEC	Hynds, K. E., 48 Caldwell Road, Woodbourne, Blenheim.7301
ZL1UED	Smith, G. P., 12 Tonar Street, Northcote, Auckland.1309
ZL1UEF	Porter, J. W., 37 Torkar Road, Clarks Beach, R.D.4, Pukekohe.1800
ZL1UEG	Lee, J. A., Oropi Road, Pyes Pa, R.D. 3, Tauranga.3021
ZL1UEH	Armstrong, M. J., 117 Woodlands Road, Opotiki.3472
ZL1UEI	Pritchard, R. E., 74 Meadowvale Avenue, Forrest Hill, Auckland.1310
ZL1UEJ	Maindonald, P. G., 14 Te Ana Place, Linmore, Rotorua.3201
ZL1UEK	Morecraft, I. G., 8 Valley Road, Pukekohe.1800
ZL1UEL	Abraham, G. J., 25 Churchill Street, Whakatane.3400
ZL1UEM	Rawlings, P. J., Wheki Valley, S. H . 14, Maungatapere.0250
ZL1UEN	Peters, J. W., 9 Taiporutu Place, Rotorua.3201
ZL1UEO	Porter, M. J., 37 Torkar Road, Clarks Beach, R.D.4, Pukekohe.1800
ZL1UEQ	Mowatt-Wilson, K. A., 106 Moore Street, Northcote, Auckland.1309
ZL1UER	Taylor, G. M., 805 Riddell Road, St Heliers, Auckland.1105
ZL1UES	Royds, P. I., 28 Ridge Street, Tauranga.3001
ZL1UET	Seymour, D. J., 11 Addington Avenue, Manurewa.1702
ZL1UEU	Taylor, M. L., 805 Riddell Road, St Heliers, Auckland.1105
ZL1UEW	Allen, C. W., R.D.1, Broadwood, Northland.0553
ZL1UEX	Turnwald, J. B., 8 Miller Street, Point Chevalier, Auckland.1002
ZL1UEY	Voigt, R. E., Hawkins Crescent, Kerikeri.0452
ZL1UFB	McDonald, A., Bulltown Road, Waihi.2991
ZL1UFC	Warburton, J. J., 670 Papamoa Beach Road, Papamoa.3070
ZL1UFD	Ward, B. J., 11 Melville Place, Onehunga, Auckland.1106
ZL1UFE	White, D. E. G., 34 Haseler Crescent, Howick, Auckland.1705
ZL1UFG	Zeeders, P. J., R.D. 2, Te Aroha.2971
ZL1UFH	Nisbet, G. S., 18 Hillcrest Road, Kaikohe.0400
ZL1UFJ	Fortune, D. L., 129 Bleakhouse Road, Howick, Auckland.1705
ZL1UFK	Biggar, D. R., 6 Pickwick Parade, Howick, Auckland.1705
ZL1UFL	Allen, G. D., 19 Robley Crescent, Glendowie, Auckland.1105
ZL1UFN	Gallaugher, I. R., Potts Road, R.D. 1, Howick.1731
ZL1UFP	Rumble, O. W., 5 Apollo Place, Rotorua.3201
ZL1UFQ	Nilsson, R. E., 52a Alison Street, Hamilton.2001
ZL1UFR	Williamson, D. H., 38a Waikato Esplanade, Ngaruawahia.2171
ZL1UFS	Shaw, P. J., Selwyn Crescent, Ohaupo.2452
ZL1UFU	Frost, D. A., 183 Massey Street, Hamilton.2001
ZL1UFV	Gilbert, M. S., C/- Electricorp Hostel, 1 Iwiheke Place, Turangi.3371
ZL1UFW	Nicholls, G. R. B., 7 Eastern Beach Road, Bucklands Beach.1704
ZL1UFY	James, T. C., 12 McHardy Place, Glenfield, Auckland.1310
ZL1UFZ	Pirihi, R. G., Hobsonville Officers' Mess, RNZAF Base, Auckland.1450
ZL1UGA	Mulder, R. G., 44 Marvon Downs Avenue, Pakuranga, Auckland.1706
ZL1UGB	Clark, S. P., c/- A.J.Snedden, Taurangaruru Road, R.D.3, Waiuku.1852
ZL1UGC	Sturgess, J. G., c/- 18b Meadowlands Drive, Howick, Auckland.1705
ZL1UGD	Parr, A. J., c/- Parr, R.D. 3, Ohaupo.2452
ZL1UGE	Benner, M. T., 18 Andes Avenue, Mangere Bridge, Auckland.1701
ZL1UGF	Dempsey, J. M., 47 Elizabeth Street, Rotorua.3201
ZL1UGG	Hewer, P. K., 16 Adel Place, Weymouth.1702
ZL1UGH	Walsh, R. H. N., 84 Paraonui Road, Tokoroa.2392
ZL1UGI	Parsonage, P. C. J., 45a Takutai Avenue, Bucklands Beach, Auckland.1704
ZL1UGK	Baumgartner, A. E., 92 Ardern Avenue, Whangaparaoa.1463
ZL1UGL	Donaldson, P. N., 21 Macmurdo Avenue, Glenview, Hamilton.2001
ZL1UGM	Mowry, A. K., c/- 9 Victoria Avenue, Whakatane.3400
ZL1UGN	Brown, E. L., 42a Kowhai Avenue, Upper Hutt.6401
ZL1UGO	Maxwell, L. S., 70 Sylvan Crescent, Te Atatu, Auckland.1208
ZL1UGT	Gulliver, K. E., 2/114a Kervil Avenue, Te Atatu North, Auckland.1208
ZL1UGU	Bird, C. A., 84 Whau Valley Road, Whangarei.0101
ZL1UGV	Cole, N. G., Kawiu Road, Levin.5500
ZL1UGX	Armstrong, K. J., 12 Churchill Street, Pukekohe.1800
ZL1UGZ	Hannah, R. T., 61 Rhine Vale Close, Western Heights, Henderson.1208
ZL1UHA	McLaren, G. C., 18a North Street, Whangarei.0101
ZL1UHG	Dentith, C. C. R., 60 Ngataringa Road, Devonport, Auckland.1309
ZL1UHJ	Carruthers, A. J., 61 Drake Street, Howick, Auckland.1705
ZL1UHK	Cavanaugh, F. N., 6 Harvey Place, Kohimarama, Auckland.1105
ZL1UHL	Buchan, D. R., 29 Price Crescent, Mt Wellington, Auckland.1106
ZL1UHM	Ellmers, L. A., 8 Alamein Avenue, Onerahi, Whangarei.0101
ZL1UHN	Jacobson, I. R. B.(Dr), 10c Holgate Road, Kohimarama, Auckland.1105
ZL1UHO	Craig, G. G. P., 14 Jenner Road, Nelson.7001
ZL1UHQ	Smith, D. J., 156 Rangitoto Road, Papatoetoe.1701
ZL1UHR	Wendelborn, L. N., 46 Danbury Drive, Torbay, Auckland.1310
ZL1UHS	Windram, M. R., 30 Pluto Place, Birkenhead, Auckland.1310
ZL1UHT	Griffin, M. E., 12 Valley Road, Pukekohe.1800
ZL1UHU	Davey, A. J., 5 Capricorn Place, Browns Bay, Auckland.1310
ZL1UHV	Tennent, R. C., 107a New Windsor Road, Avondale, Auckland.1207
ZL1UHX	Brammer, P. A., Ashers Road, R.D. 5, Tauranga.3021
ZL1UHZ	Sutton, L. M., 207 Fergusson Drive, Thames.2801
ZL1UIA	Paton, J. S., 1 Tamariki Avenue, Kelston, Auckland.1207
ZL1UIB	Sykes, N. J., Hutt Hospital Nurses Home, High Street, Lower Hutt.6301
ZL1UIC	Gilbert, A. J., 25 King Street, Cambridge.2351
ZL1UID	Gordon, S. L., 34 Pallant Street, Manurewa.1702
ZL1UIE	Carpenter, R. W., 22 Ridgewood Crescent, Auckland., P.O.Box 66105, Beach Haven.1330

ZL1UIF	Apel, J., 82 Wharf Road, Ostend, Waiheke Island.1470
ZL1UIG	Abbot, S. A., 3a Pa Road, Pukerua Bay, Wellington.6252
ZL1UIH	Ruiter, R., 43 Woolley Street, Christchurch.8007
ZL1UII	Bridge, B. E. A., 17 Paddington Street, Glen Innes, Auckland.1106
ZL1UIK	Shireman, D. V., 11 McEntee Road, Waitakere, Auckland.1231
ZL1UIM	Campbell, R. S., 25 Eccles Place, Otara, Auckland.1701
ZL1UIO	Frew, D. J., c/- 116a Osprey Drive, Tauranga.3001
ZL1UIP	Glass, G. W., Gun Club Road, R.D.1, Pukekohe.1800
ZL1UIQ	Wilken, R. M., Flat 3, 23 Hillcrest Avenue, Northcote, Auckland.1309
ZL1UIR	Wilson, G. J., 21 Betley Crescent, Hamilton.2001
ZL1UIS	Smiley, R. E., Pakiri Block Road, Tomorata, R.D. 4, Wellsford.1493
ZL1UIU	Jenkins, S. E. M., 35 Robertson Street, Rotorua.3201
ZL1UIW	Kearns, B. T., c/- M.M.Hill, Mangataipa Road, R.D.2, Okaihau.0455
ZL1UIY	Stevenson, R. A., 761 East Coast Road, Browns Bay, Auckland.1310
ZL1UIZ	Barnett, N. R., Pokuru, R.D.5, Te Awamutu.2400
ZL1UJA	Morrissey, M. A., 19 Chadlington Street, Christchurch.8009
ZL1UJC	Corrigan, T. L., 4/278 Birkdale Road, Birkdale, Auckland.1310
ZL1UJD	Stewart, B. C., R.D. Larmers Road, P.O. Box 421, Kaitaia.0500
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ZL2GI	Banks, K. G., 29 Taunton Place, Stoke, Nelson.7001
ZL2GJ	Pearce, R. A., 17 Lake Ferry Road, R.D. 2, Featherston.5952
ZL2GK	Motueka Branch NZART, see Branch Directory
ZL2GL	Dormer, F. G., 18 Marquet Place, Tairua via Thames.2853
ZL2GM	Minshall, G. T., 8 Woodward Street, Taupo.3300
ZL2GN	Reakes, G. C., 5 Paisley Street, Levin.5500
ZL2GO	Fownes, H. G., 71 Rimu Road, Paraparaumu.6152
ZL2GP	Ru Bay, J., P.O.Box 5063, Palmerston North.5300
ZL2GQ	Morgan, R. S. H., 18 Hammerton Street, Naenae, Wellington.6301
ZL2GR	Stiles, G. R., 376b Hardy Street, Nelson.7001
ZL2GS	Henry, A. S., 2c Crescent Street, Richmond.7002
ZL2GT	Napier Amateur Radio Club Contest Group, (Trustee ZL2AHC), c/- Stan White, 20 Henley Crescent, Napier.4001
ZL2GU	Hanley, R. H., 15 Pirie Street, Palmerston North.5301
ZL2GV	Hutton, J. D., Huttons Nawton Mall Pharmacy, Grandview Road, Hamilton.2001
ZL2GW	Beatson, A. P., Orinoco, R.D. 1, Motueka.7161
ZL2GX	White, J. M., 152 Lytton Road, Gisborne.3801
ZL2GY	Taillie, L. I., Old Post House, Te Kemara Avenue, Paihia.0252

ZL2GZ	Panckhurst, K. D., 117 Whitaker Street, Gisborne.3801
ZL2HA	Gentry, L. J. (Mrs), 8 Chudleigh Grove, Churton Park, Wellington.6004
ZL2HB	Stephens, D. A., 2 Riverbend Road, Napier.4001
ZL2HC	Bradbury, N. H., 19 Avon Street, Waterloo, Lower Hutt.6301
ZL2HD	Andrews, J. R., 66 Khandallah Road, Khandallah, Wellington.6004
ZL2HE	Law, A. E., Umutaoroa, R.D. 8, Dannevirke.5491
ZL2HF	French, W. B., 4 Rata Place, Masterton.5901
ZL2HG	Breen, P. W., Poraiti, R.D. 2., Napier.4021
ZL2HH	Simpson, L. J., 6b Seddon Street, Waikanae.6154
ZL2HI	Willis, M. W., Harpoon Hill, Whangaparapara, Great Barrier Island.1470
ZL2HJ	Garrett, W. E. A., 128 Pendarves Street, New Plymouth.4601
ZL2HK	Wakely, J. R., 109 Mt View Road, Wanganui.5001
ZL2HN	Dayman, F. R., 31 Fergusson Drive, Gisborne.3801
ZL2HO	Warner, B. A., 23 City View Grove, Harbour View, Lower Hutt.6301
ZL2HP	Kendrick, T. J., 3 Ascot Street, Palmerston North.5301
ZL2HQ	Harris, G. F., 15 Montana Road, Upper Hutt.6401
ZL2HS	Shennan, C. V., Highway 3, P.O. Box 30, Turakina.5152
ZL2HT	Hooker, D. D., 1a Reeve Drive, Havelock North.4201
ZL2HV	Hutt Valley Branch NZART (Inc.), see Branch Directory
ZL2HW	Marsh, N. O., 16 Harris Street, Waitara.4656
ZL2HX	Cossgrove, D. A., 7 Torquay Terrace, Wellington.6002
ZL2HY	Green, W. J., 6 Ash Street, Gisborne.3801
ZL2IB	Dannevirke Branch NZART (Inc.), see Branch Directory
ZL2IC	Sharman, L. A., 43 Tom Parker Avenue, Napier.4001
ZL2IE	Millard, O. J., Main Road, Clive.4152
ZL2IF	Rolle, E. G., 2/14 Arapiki Road, Stoke, Nelson.7001
ZL2IG	Tombs, E. P., Ihakara, R.D. 1, Levin.5500
ZL2IH	Selwood, G. R., 62b Mazengarb Road, Paraparaumu Beach.6153
ZL2II	Caldwell, D. G., 88 Jubilee Road, Khandallah, Wellington.6004
ZL2IJ	Eastwood, R. J., 39a College Street, Wanganui.5001
ZL2IK	Mulhare, P. J., 88 Tiverton Road, Blockhouse Bay, Auckland.1207
ZL2IL	Pottinger, R. S., 32 De Menech Grove, Avalon, Lower Hutt.6301
ZL2IM	McLea, Q. F., 322 Devon Street West, New Plymouth.4601
ZL2IN	Crumpton, R. E., 27 Kapiti Crescent, Titahi Bay.6202
ZL2IO	Collins, E. S., Main Road, Wakapuaka, R.D. 1, Nelson.7021
ZL2IP	Treeby, R. J., 7 Turehu Street, New Plymouth.4601
ZL2IQ	Cassey, R., 9 Alabama Road, Blenheim.7301
ZL2IR	Cuttriss, N. A., 40 Redvers Drive, Belmont, Lower Hutt.6301
ZL2IS	Were, G., 180 Regan Street, Stratford.4700
ZL2IT	Lilley, E. C. C., 1b Harvey Road, Napier.4001
ZL2IU	Purdey, R. G., 7 Burmuda Grove, Paraparaumu.6152
ZL2IV	Gorman, D. D., 15 Lawson Place, Mt Victoria, Wellington.6001
ZL2IW	Carter, R. S., 16a Farmar Street, Blenheim.7301
ZL2IX	Parker, C. H., Tiraumea Road, Pahiatua.5471
ZL2IY	Gorman, W. D., 11 David Crescent, Karori, Wellington.6005
ZL2IZ	Bartleet, J. R., 165 Valley Road, Gisborne.3801
ZL2JA	Wanganui Branch NZART (Inc.), see Branch Directory
ZL2JB	Bullen, W. G., 11 Tasman Street, New Plymouth.4601
ZL2JC	Cook, S. A., Awakino Road, R.D. 1, Te Kuiti.2500
ZL2JD	Duncan, J. R., 7 Crown Hill, Onepoto, Titahi Bay.6202
ZL2JE	Morison, R. D., 40 Kiriwai Road, Paramata.6250
ZL2JF	Pickering, L. D., c/- 138 Cranford Street, Christchurch.8001
ZL2JG	Anderson, G. A., 20 Leybourne Avenue, Waikanae.6154
ZL2JH	Nicol, D. S., 12 Hewitts Road, R.D. , Linton.5450
ZL2JI	Thompson, J. P., 1 Healey Place, Gisborne.3801
ZL2JJ	Byam, S. P., R.D. 2, Waverley.5182
ZL2JK	Butler, D. B., Gorge Road, R.D. , Otaki.6171
ZL2JL	Prime, D. R., 57 Waerenga Road, Otaki.6171
ZL2JM	Moore, J. A., 1 Denbigh Street, Feilding.5600
ZL2JN	Hodder, A. A., 394 Somme Parade, Wanganui.5001
ZL2JO	Lambert, N. H., 7 Sunbrae Drive, Silverstream.6402
ZL2JP	Hinchcliffe, R. G., Castlepoint Delivery Centre, Castlepoint, Wairarapa.5970
ZL2JQ	White, J. T., 121a Tasman Street, Nelson.7001
ZL2JS	Black, I. W., 46 Harris Street, Marton.5151
ZL2JT	Mackie, J. B., 8 Tarata Street, Stoke, Nelson.7001
ZL2JV	Crawford, C. R. H., 20 Chapman Crescent, Naenae, Lower Hutt.6301
ZL2JX	Hodgson, E. R., 20 Colombo Street, Palmerston North.5301
ZL2JY	Vincent, G. C., 91 Derby Street, Feilding.5600
ZL2JZ	Jury, E. G., "Glendower", Ponatahi Road, R.D. 2, Carterton.5951
ZL2KA	Blakeley, P. W., 78 Upland Road, Kelburn, Wellington.6005
ZL2KB	Kapiti Branch 69 NZART (Inc.), see Branch Directory
ZL2KC	Moess, C. R., 13 Churchill Avenue, Feilding.5600
ZL2KD	Shepherd, D. A. C., 13 View Road, Titahi Bay.6202
ZL2KE	Smith, W. A. D., P.O.Box 72, Urenui.4655
ZL2KF	Fellows, S. K., 21 Harbourview Road, Wellington.6005
ZL2KG	Sharland, K. O., Kina Beach Road, R.D. 1, Upper Moutere.7152
ZL2KI	Armstrong, M. W., 58 Winchester Street, Levin.5500
ZL2KJ	Casey, B. F., 45 Ames Street, Paekakariki.6151
ZL2KK	Kerr, R. F., 149 Tainui Terrace, Te Awamutu.2400
ZL2KL	Johns, T. H., 4 Sydney Place, Wanganui.5001
ZL2KM	Robertson, G. A., 34 Upham Street, Taradale.4001
ZL2KN	Trainor, A. P. T., 118 Dimock Street, Titahi Bay, Wellington.6202
ZL2KO	Manawatu Branch NZART Inc., see Branch Directory
ZL2KP	Lowe, E. E., 17 Ellesmere Crescent, Palmerston North.5301
ZL2KR	Cole, K. R., 10b Pohutukawa Crescent, Raumati Beach.6150
ZL2KS	Marlborough Branch NZART Inc., see Branch Directory
ZL2KT	Brooker, R. G., Ikanui Road, Hastings.4201
ZL2KU	Donald, R. J., Long Bay Road, P.O.Box 36, Coromandel.2851
ZL2KV	Martin, C. J. T., Mountain Road, Inglewood.4651
ZL2KX	Wickstead, C. G., 1/25 Avondale Road, Taradale, Napier.4001
ZL2KY	Conner, M. G., 3 Oxford Crescent, Upper Hutt.6401
ZL2KZ	Kingston, G., 53 Tannadyce Street, Wellington.6003
ZL2LB	Milner, M. O., 38 Lincoln Avenue, Tawa, Wellington.6203
ZL2LC	Chapman, M. A., 21 Waikato Street, Island Bay, Wellington.6002
ZL2LD	Munn, P. M., 111 Essex Street, Masterton.5901
ZL2LE	Pinhey, J., 210 Tukapa Street, New Plymouth.4601
ZL2LF	Dingley, P. D., 8 Vogel Place, Napier.4001
ZL2LG	Dunning, S. P., 17 Kanpur Road, Wellington.6004
ZL2LH	Sharland, R. T., 409 Wakefield Quay, Nelson.7001
ZL2LI	Simpson, C. J. C., 125 Broderick Road, Johnsonville, Wellington.6004
ZL2LJ	O'Grady, P. L., 8 Cambridge Street, Tawa.6203
ZL2LM	Merrick, L. F., 22 Bledisloe Avenue, Nelson.7001
ZL2LN	Davenport, N. B., 3 Blomfield Place, Motueka.7161
ZL2LO	Kerr, C. M., 99 Mt View Road, Wanganui.5001
ZL2LQ	Coote, D., 19 Corlett Road, Plimmerton.6251
ZL2LR	Dinnan, E. J., 6 Warren Street, Paparangi, Wellington.6004
ZL2LS	Kirkland, F. S., Petane Grange, R.D. 2, Napier.4021
ZL2LV	Ryan, J. F., 44 Sylvan Avenue, Waikanae.6154
ZL2LW	Wright, L. J., 14 Tennyson Street, Upper Hutt.6401
ZL2LX	Motion, R., 80 Haukore Street, Maungatapu, Tauranga.3001
ZL2LZ	Rumsey, J. R., 51 Freyberg Street, Lyall Bay, Wellington.6003
ZL2MA	McGuire, K. J., 14 De Castro Place, Titahi Bay.6202
ZL2MB	Montgomerie, J. C., 11 Gardiner Place, Havelock North.4201
ZL2MC	Waikanae District Museum Radio Club, (Trustees: ZL2DR,ZL2JG), 9 Elizabeth Street, Waikanae.6154
ZL2MD	Mills, C. W., 43 Great North Road, Wanganui.5001
ZL2ME	Roe, C. R., 9a Churchill Street, Kaikoura.7351
ZL2MG	Waimarino Branch NZART Inc., see Branch Directory
ZL2MH	Neal, E. W., 116a Waerenga Road, Otaki.6171
ZL2MI	McCulloch, J. G., 81 Kemp Street, Kilbirnie, Wellington.6003
ZL2MJ	Perry, F. G., P.O. Box 124, Otaki.6171
ZL2MK	Puddy, R. D., 18a Hammond Road, Taradale, Napier.4176
ZL2ML	Castles, C. R. M., 2 Kauri Street, Gisborne.3801
ZL2MM	Adcock, H. F., 78 Opaki Road, Masterton.5901
ZL2MN	Meyer, L. H., 23 Canterbury Street, Tamatea, Napier.4001
ZL2MO	Brown, N. L., 72 Kapanui Road, Waikanae.6154
ZL2MQ	Crook, P. M., 6 Bale Place, Havelock North.4201
ZL2MR	Blair, D. I., 9 Dickson Crescent, Wanganui.5001
ZL2MS	Strange, D. E., 19 Perry Street, Heretaunga, Upper Hutt.6401
ZL2MT	Railton, G. H., 85a Pleasant Road, Glen Eden, Auckland.1208
ZL2MU	Jupp, A. L., 1322 Devon Road, 42 R.D. , Waitara.4656
ZL2MV	Fail, D. G., 68 Brightwater Terrace, Palmerston North.5301
ZL2MW	Clark, M. J., 115 Maxwell Road, Blenheim.7301
ZL2MX	Bellini, B. C., 11 Handley Place, New Plymouth.4601
ZL2MY	Spackman, T. J., 224 Parklands Avenue, New Plymouth.4601
ZL2MZ	Pool, B. L., 9 Rembrandt Avenue, Linden.6203
ZL2NA	Shanks, J. M., 21 Pokohiwi Road, Normandale, Lower Hutt.6301
ZL2NB	Barlow, F. E., 15 Sutherland Crescent, Melrose, Wellington.6003
ZL2NC	Lethbridge, P. J., 7 Salcombe Terrace, New Plymouth.4601

ZL2ND	Shaw, A. J., "Little Broom", R.D. 2, Napier.4021
ZL2NF	Frazer, G. C., 14 Hinton Road, Napier.4001
ZL2NG	Aked, M. S., 10 Vaucluse Avenue, Paraparaumu Beach.6153
ZL2NH	Bayly, R. B., Wainui Road, Gisborne.3801
ZL2NI	Dumbleton, G. W., 6 Naughton Terrace, Kilbirnie, Wellington.6003
ZL2NJ	Tarrant, P. E., 104b Main Street, Foxton.5551
ZL2NK	Donaldson, B. J., 184 Normandale Road, Lower Hutt.6301
ZL2NL	Clinch, V. J., 20 Scotland Street, Picton.7372
ZL2NM	Stewart, H. A. S., 35 Lockwood Road, R.D. 5, Palmerston North.5321
ZL2NN	Pye, J. C., 33 Wyndham Road, Pinehaven, Upper Hutt.6402
ZL2NO	Grace, K. E., 9 Te Ara Road, Pukerua Bay.6252
ZL2NP	Smith, F. J. A., 21 Otatara Road, Taradale, Napier.4001
ZL2NQ	Evaroa, D. T., Appleby Road, R.D. 7, Drury, Auckland.1752
ZL2NR	Rubery, T. F., 3 McDonald Place, Marton.5151
ZL2NS	Douche, W. P., 347 Ohiro Road, Brooklyn, Wellington.6002
ZL2NU	Budd, L. A., 69 Tahuri Street, Manaia, Taranaki.4851
ZL2NV	Johnston, A. F., 21 Brooklands Road, Atawhai.7001
ZL2NX	Kiwi Contest Group, (Trustee ZL2BNJ), c/- M. J. French, 10 Gurney Road, Lower Hutt.6301
ZL2NY	Weissberg, B. G., Otuhi Road, R.D. 9, Whangarei.0121
ZL2NZ	Milner, G. L. (Mrs), 38 Lincoln Avenue, Tawa, Wellington.6203
ZL2OA	Wairarapa Branch NZART (Inc.), see Branch Directory
ZL2OB	Pye-Smith, J., 161a Milton Street, Nelson.7001
ZL2OC	Lambie, W. L., 12 Foster Street, Avalon.6301
ZL2OD	Barnes, W. D., 142 Renall Street, Masterton.5901
ZL2OE	Logan, D. J., 42 Horokiwi Road West, Newlands, Wellington.6004
ZL2OF	Pentelow, L. C., Kina Road, No 1 R.D. , Opunake.4653
ZL2OG	Chisnall, R. R., 71 Lakings Road, Blenheim.7301
ZL2OH	McMillan, W. I., 7 Hillary Street, Tawa.6203
ZL2OJ	Sainsbury, R. P., 34 York Street, Masterton.5901
ZL2OK	Dickson, A. J., 193 Park Road, Palmerston North.5301
ZL2OL	Sigglekow, R. W., 9 Raukawa Street, Stokes Valley.6306
ZL2OM	Cooksey III, W. R., 112 Oak Street, Gisborne.3801
ZL2ON	Symons, R. T., 3/55 Church Road, Taradale, Napier.4001
ZL2OO	Smith, A. H., Rangiotu-Rongotea Road, R.D. 7, Palmerston North.5321
ZL2OP	Scambary, G. E., 54 Athlone Crescent, Lower Hutt.6301
ZL2OQ	Prichard, G. H., 14 Queen's Road, New Plymouth.4601
ZL2OR	Osborne, D. O., 9 Greenock Place, Palmerston North.5301
ZL2OS	Lonsdale, J., 41 Maxwell Avenue, Wanganui.5001
ZL2OV	Lee, W. C., 11 Henderson Street, Karori, Wellington.6005
ZL2OZ	Martin, O. W., 21b Cadman Street, Dannevirke.5491
ZL2PA	Leete, J. B., 22 Lansdowne Crescent, Masterton.5901
ZL2PB	McLaren, H. B., 10 Towai Street, Stoke, Nelson.7001
ZL2PC	Mitchell, G. W., 20 Tainui Street, Raumati Beach.6150
ZL2PD	Woodfield, A. O. J., 24 Beverley Street, Christchurch.8001
ZL2PF	King, T., 126 Russell Street, Gisborne.3801
ZL2PG	Laird, A. K., 24 Patrick Street, Petone.6303
ZL2PH	Hanify, G. C. P., 40 Surrey Road, Wanganui.5001
ZL2PI	Treleaven, A. R., 88 Monrad Street, Palmerston North.5301
ZL2PJ	Spellman, P. J., 36 Record Street, New Plymouth.4601
ZL2PL	Young, C. T., 3a Princeton Road, Raumati Beach.6150
ZL2PM	Coneybeer, G. B., 103 Campbell Street, Wanganui.5001
ZL2PO	Tout, R. E., 1/132 Collingwood Street, Nelson.7001
ZL2PP	Sinclair, J. D. J., 13 Marlowe Street, Stoke, Nelson.7001
ZL2PQ	Sayer, L. A (Ms), 49b Peach Road, Glenfield, Auckland.1310
ZL2PR	Speedy, S. B., "Woodbank", Private Bag, Dannevirke.5491
ZL2PS	Petone Technical Inst. Radio Club, (Trustee ZL2AVF), Private Bag, Petone.6331
ZL2PT	Meyrick, B. B. P., 14 Churcher Street, Feilding.5600
ZL2PU	Pye, J. T., 33 Wyndham Road, Pinehaven, Upper Hutt.6402
ZL2PV	Molony, M., 66 Longfellow Street, Upper Hutt.6401
ZL2PY	Heslop, H. G., 6 Leicester Street, Stoke, Nelson.7001
ZL2QA	Kermeen, L. V., 22 Chittick Street, Stokes Valley.6306
ZL2QB	Wenzel, K. D., R.D. 1, Upper Moutere.7152
ZL2QC	Noble, W. A., 170 Te Atatu Road, Te Atatu South, Auckland.1208
ZL2QD	de la Cour, C., 20 Whaui Street, Wellington.6002
ZL2QF	Patea Branch NZART (Inc.), see Branch Directory
ZL2QG	Brunton, W.R., 98 Hospital Road, Blenheim.7301
ZL2QI	Cheesman, R. A., 20 Parkway, Wainuiomata.6305
ZL2QJ	Lane, L. A., 41 Punga Street, Tangimoana.5450
ZL2QK	Kenny, E. J., 5 Townley Street, Gisborne.3801
ZL2QM	Burry, J. P. P., Westshore Motor Camp, Westshore, Napier.4001
ZL2QN	Burrell, G. A., 20a Tawa Terrace, Tawa.6203
ZL2QQ	Cook, S. T., 57 Stanley Crescent, Nelson.7001
ZL2QR	Abel, A. J., 20 Ranfurly Road, Feilding.5600
ZL2QS	Padman, N. B., 12a McHardy Street, Havelock North.4201
ZL2QW	Carr, P. (Mrs), 21 Hardie Grove, Featherston.5952
ZL2QX	Robinson, D. M., 21 Blackmore Drive, Rotorua.3201
ZL2QY	Neilson, P. D. (Mrs), 13 Matene Street, Otaki.6171
ZL2QZ	Wright, B. E., 27 Stanley Street, Wainuiomata.6305
ZL2RB	Thompson, C. I. N., 19 Bideford Street, New Plymouth.4601
ZL2RE	Norling, E. W. J., 17 Ngarimu Street, Palmerston North.5301
ZL2RF	Fletcher, A. E., 480 Fergusson Drive, Upper Hutt.6401
ZL2RG	Robb, P. J., 277 Neilson Street, Onehunga, Auckland.1106
ZL2RI	Savell, B. E., 4 Burnham Street, Petone.6303
ZL2RJ	Hopgood, D. J., 45 Lomita Road, Johnsonville, Wellington.6004
ZL2RM	Collecutt, G. P., 60 Hawera Road, Kohimarama, Auckland.1105
ZL2RN	Royal Naval Amateur Radio Society (NZ Branch), (Trustee: ZL2TX), 55 Kakariki Grove, Waikanae.6154
ZL2RO	Ashford, J. W., c/- Omaio Village, P.O. Box 2045, Stoke.7030
ZL2RQ	Small, J., 3 Bristol Street, Upper Hutt.6402
ZL2RS	Coote, S. R., 20 Tuckett Place, Nelson.7001
ZL2RT	Jackson, H. R., Takarei Terrace, Mokau.4650
ZL2RU	Rowe, I. S., 88 Washington Avenue, Brooklyn, Wellington.6002
ZL2RV	Wells, R. E., Tawhara Station, Wairoa.4192
ZL2RX	Randall, R. E. B., 32 Rotomanu Crescent, Mangakino.2391
ZL2RY	Baker, P. N., 12 Shackle Lane, Whitby, Wellington.6253
ZL2RZ	Wall, A. M., Homewood Road, R.D. 12, Masterton.5921
ZL2SA	Hamer, B., 5 Harewood Grove, Fendalton Park, Upper Hutt.6401
ZL2SB	Petherick, E. R., 23 Anaru Street, Raumati Beach.6150
ZL2SD	White, R. L., 74 Norbiton Road, Foxton.5551
ZL2SE	Armstrong, G. C., 20 Mohaka Street, Wainuiomata.6305
ZL2SF	Lewis, A. W., 18 Finlay Terrace, Mt. Cook, Wellington.6002
ZL2SH	Beale, A. L., 14 Te Oti Street, Paraparaumu Beach.6153
ZL2SJ	Norden, A. P., see Overseas Members
ZL2SK	Adamson, D. P., Old Kipps Road, R.D. 10, Palmerston North.5321
ZL2SN	Black, R. B., Omahu Road, R.D. 5, Hastings.4221
ZL2SO	McDonell, D., 124 Cook Street, Palmerston North.5301
ZL2SP	Pahiatua Branch NZART (Inc.), see Branch Directory
ZL2SQ	McQuillan, H., Tasman R.D. 1, Upper Moutere.7152
ZL2SR	Carran, S. R., 39 Te Aroha Street, Claudelands, Hamilton.2001
ZL2SS	Wallace, G. J., 5 Westland Road, Wellington.6002
ZL2ST	Rolfe, D., 12 Haydon Street, Palmerston North.5301
ZL2SU	Harris, J. R., 148 Condell Avenue, Christchurch.8005
ZL2SW	Wedderspoon, W., 4 Cardall Street, Newtown, Wellington.6003
ZL2SX	Andrews, D. V., 66 Khandallah Road, Wellington.6004
ZL2SY	Hartwell, L. W., 41 Kells Avenue, Wanganui.5001
ZL2SZ	Pye, E. G. (Mrs), 33 Wyndham Road, Pinehaven, Upper Hutt.6402
ZL2TA	McNearnie, K. B., 8 Dunk Place, Palmerston North.5301
ZL2TB	Linney, E., 6 Bailey Grove, Trentham.6401
ZL2TC	Dale, K. W., 4 Foyle Street, Wellington.6002
ZL2TE	Ireson, S., 18 Gardenia Avenue, Bell Block, New Plymouth.4602
ZL2TF	McKelvie, H. J. M., 32 Fitzroy Street, Napier.4001
ZL2TG	Parker, B. W., 59 Routley Crescent, Upper Hutt.6401
ZL2TH	Weenink, H., 16 Mahoe Street, Lower Hutt.6301
ZL2TI	Conner, D. P., 40 Marewa Road, Hataitai, Wellington.6003
ZL2TJ	Torley, J. D., 11 Moorhouse Street, Taradale, Napier.4001
ZL2TK	Garing, T. R., 17 Cotswold Crescent, Newlands, Wellington.6004
ZL2TL	Wright, H. A. L., 130 Pukepapa Road, Marton.5151
ZL2TM	Edwards, F. R., 4 Lewis Street, Gisborne.3801
ZL2TN	Brighting, T. L., 18 Ashford Avenue, Palmerston North.5301
ZL2TO	Waitara Branch NZART, see Branch Directory
ZL2TP	Pascoe, E. J., 22 Centennial Crescent, Gisborne.3801
ZL2TQ	Jensen, R. T., 33 Iona Road, Havelock North.4201
ZL2TR	Dallimore, S. C., 26 Marybank Road, Atawhai, Nelson.7030
ZL2TS	Nixon, H. W. J., 19 Bay Drive, Titahi Bay, Wellington.6202
ZL2TT	Wills, R. E., 24 View Road, Wellington.6202
ZL2TU	Adin, B. E., 18 Duke Street, Levin.5500
ZL2TV	Boyer, J. P., 32 Beachville Crescent, Nelson.7001
ZL2TW	McCutcheon, O. D. F., c/- 13 Moeller Street, Taradale.4001
ZL2TX	Hardy, N. A. T., 55 Kakariki Grove, Waikanae.6154
ZL2UB	Lowe, J. M., 23 Te Whiti Road, Korokoro, Petone.6303
ZL2UC	Saunderson, R. W., 26 Waiho Terrace, Porirua.6201
ZL2UD	Rodda, P. J., 11 Avion Terrace, Paraparaumu Beach.6153
ZL2UF	Arthur, D. B., 51 Maraetai Heights Road, Maraetai.1705
ZL2UH	Leslie, D. A., 3 Carter Street, Belmont, Lower Hutt.6301
ZL2UI	Bailey, I. L., 42 Catlins Crescent, Palmerston North.5301

ZL2UK	Hulls, C. H., 11 Margaret Street, Levin.5500
ZL2UL	Lyford, A. W., 8 Roto Street, Tahunanui, Nelson.7001
ZL2UN	Robinson, C. B., 58 Denbigh Road, Feilding, P.O. Box 429.5600
ZL2UQ	Williams, R. C., 10a Stuart Street, Levin.5500
ZL2UR	Lockie, H. A., 70 Cashmere Avenue, Wellington.6004
ZL2UT	Davoren, B. J., 25 Rutene Road, Gisborne.3801
ZL2UV	Kibble, A. R., Horokiwi Hill, Petone.6303
ZL2UW	Naulls, R. D., Brauncewell Farm, Tangihua Road, Maungakaramea.0250
ZL2UX	MacDonald, J. R., 39 Aniseed Grove, Upper Hutt.6401
ZL2UY	Parker, H. J., 15 Bush Street, Naenae, Lower Hutt.6301
ZL2UZ	Spotswood College Amateur Radio Club, (Trustee: ZL2BBN), Private Bag, New Plymouth.4620
ZL2VA	Vaughan, D. L., 70 Glen Road, Raumati South.6150
ZL2VB	Browne, A. H., 98 Renown Road, Raumati South.6150
ZL2VC	Zawodny, C. J., 8 Burwood Road, Christchurch.8009
ZL2VD	Tideman, A. L., R.D. 2, Nelson.7021
ZL2VE	Hansen, G. H., 9 Sanders Avenue, Napier.4001
ZL2VG	Smith, I. R., "Lyndon", R.D. 3, Te Karaka.3871
ZL2VH	Upper Hutt Branch NZART (Inc.), see Branch Directory
ZL2VI	Manning, E. E., 33 Tiverton Crescent, New Plymouth.4601
ZL2VJ	Angelini, H. J., R.D. 2, Pahiatua.5471
ZL2VK	Wallace, I. R., 22 Parson Street, Wanganui.5001
ZL2VL	Gloag, G. F., 25 Grey Street, Woodville.5473
ZL2VM	Bull, M. B., 51 Liverpool Crescent, Napier.4001
ZL2VN	Gaudin, W. G., 18 Trafalgar Street, New Plymouth.4601
ZL2VO	Hayman, G. C., 73 Makora Road, Masterton.5901
ZL2VP	Cheshire, A. H., 5 Seddon Street, Upper Hutt.6401
ZL2VQ	Gaudin, G. C. (Mrs), 18 Trafalgar Street, New Plymouth.4601
ZL2VR	Chapman, D. J., 459 Kennedy Road, Napier.4001
ZL2VS	Miller, H. R., 41 Alexandra Street, Marton.5151
ZL2VT	Arthur, A. J. M. (Mrs), 51 Maraetai Heights Road, Maraetai.1705
ZL2VV	Carter, L. J., 13 Waterview Road, Devonport, Auckland.1309
ZL2VW	Gray, O. T., 16 Gonville Avenue, Wanganui.5001
ZL2VX	Dickson, S., 67 Mills Road, Wellington.6002
ZL2VY	Klein, B. J., 49 Milne Crescent, Taita.6301
ZL2VZ	Eyles, J. R., 30 Surrey Street, Richmond, Nelson.7002
ZL2WA	Wellington VHF Group, see Branch Directory
ZL2WB	Wellington Branch NZART (Inc.), see Branch Directory
ZL2WC	Crabtree, W. D., P.O. Box 87, Napier.4000
ZL2WD	Deller, F. J. G., 3/29 Ward Street, Upper Hutt.6401
ZL2WE	Stead, J. L., Pohara, R.D. 1, Takaka.7172
ZL2WF	Wensley, N. L., 2 Riverside Drive, Whangarei.0101
ZL2WG	Nunns, H., 42 Norman Road, Gisborne.3801
ZL2WH	McAuley, A. W., 151 Townsend Road, Miramar, Wellington.6003
ZL2WI	Wilkinson, J. G., 12 Hillcrest Drive, Palmerston North.5301
ZL2WJ	Ross, J. B., Moncrieff Avenue, Tahunanui, Nelson.7001
ZL2WK	Hattersley, S. G., 15 Rata Street, Nelson.7001
ZL2WL	Hurrell, L. W., 9 Hereford Place, Tamatea, Napier.4001
ZL2WM	Lagerstedt, E. C., 83 Gordon Street, Dannevirke.5491
ZL2WN	Carlisle, J. W., 32 Nile Street, Lower Hutt.6301
ZL2WO	Burnett, A. M. R., 21 Elizabeth Street, Rangiora.8254
ZL2WR	Whitehead, E. S., Unit 12, Taradale Masonic Village, 15 Devonshire Place, Taradale, Napier.4001
ZL2WS	Scott, W. G., P.O. Box 859, Napier.4000
ZL2WT	Thomson, W. J., 33 Donald McLean Street, Newtown, Wellington.6002
ZL2WV	Rowe, J. B., 8 Evelyn Place, New Plymouth.4601
ZL2WW	Hyndman, J. E., 7 Wadsworth Crescent, Blenheim.7301
ZL2WX	Day, D. G., 106 Cleveland Terrace, Nelson.7001
ZL2WY	Mildon, J. W., 28 Christian Street, Dannevirke.5491
ZL2YL	NZ WARO, (Trustee: ZL2BOD), 20 Vogel Street, Hawera.4800
ZL2AAA	White, M. C., 502 Huia Street, Hastings.4201
ZL2AAC	Bridgman, A. H. S., 261 Mitchell Street, Brooklyn, Wellington.6002
ZL2AAD	Bartlett, L. R., 9 Waverley Street, Gisborne.3801
ZL2AAE	Kelling, A. R., 3 Dickson Street, Gisborne.3801
ZL2AAF	Duncan, R. E., 107 Ironside Road, Johnsonville, Wellington.6004
ZL2AAG	Barker, E. J., 12 Ashford Avenue, Palmerston North.5301
ZL2AAH	Sayers, R. K. F., 9 Brunswick Road, Aramoho, Wanganui.5002
ZL2AAI	McPake, E. G., 7 Balgownie Avenue, Wanganui.5001
ZL2AAJ	Davis, S. B., 8 Kawau Place, Wanganui.5001
ZL2AAK	Hubbard, J. A., 36 Queenswood Road, Levin.5500
ZL2AAM	Wilson, I. J., 83 Cracroft Street, Waitara.4656
ZL2AAN	Thompson, R. N., 1010 Gordon Road, Hastings.4201
ZL2AAO	Shackel, M. W. O., c/- Post Office, Opua.0290
ZL2AAP	Meek, P., 59 Alexander Avenue, Napier.4001
ZL2AAQ	Jeffers, R. J., 42 Raine Street, Wanganui.5001
ZL2AAS	McCutcheon, H. A., 351 High Street, Dannevirke.5491
ZL2AAT	Mowat, K. H., 9 Ruamoana Place, Omokoroa, R.D. 2, Tauranga.3021
ZL2AAU	Starck, A. J., 177 Smart Road, R.D. 2, New Plymouth.4621
ZL2AAV	Cooper, R. L., 21 Mill Street, Marton.5151
ZL2AAW	Berbedes, P. G., 12 Beach Street, Tangimoana.5450
ZL2AAX	Martin, L. H., 64 Glen Road, Stokes Valley, Wellington.6306
ZL2AAY	Turnbull, W. I., 5 Annandale Street, New Plymouth.4601
ZL2AAZ	Grundy, C. G., 119 East Frederick Street, Mayfair, Hastings.4201
ZL2ABA	Harris, W. R. B., Mangaroa Road, R.D. 4, Hastings.4221
ZL2ABB	Campbell, S. H., 20 Erin Street, Palmerston North.5301
ZL2ABC	Hughes, T., 10 Bainton Street, Christchurch.8005
ZL2ABD	Stampa, K. W., Normanby Road, Manaia.4851
ZL2ABE	Erwood, E., 190 Waimea Road, Nelson.7001
ZL2ABF	Foley, T. J., 115 Taradale Road, Napier.4001
ZL2ABG	McGee, N., 2 Waldron Crescent, Abbotsford, Dunedin.9006
ZL2ABI	Smith, D. L., 705 Maitland Crescent, Hastings.4201
ZL2ABJ	Napier Branch NZART (Inc.), see Branch Directory
ZL2ABL	Bramley, K. J., 14 Rembrandt Avenue, Linden.6203
ZL2ABM	Elvy, D. L., 7 Norwich Street, Wellington.6005
ZL2ABN	Ridding, G. B., 50 Mulberry Street, Maungaraki, Lower Hutt.6301
ZL2ABO	Hughes, A. H., 117 Park Road, Palmerston North.5301
ZL2ABQ	Keenan, D. St. J., 13 Ruru Crescent, Heretaunga Park, Silverstream.6402
ZL2ABR	Parkinson, J. H., 1009 Rata Street, Hastings.4201
ZL2ABT	Turner, O. D., Cadman Road, Dannevirke.5491
ZL2ABU	van der Burgh, J. E. C., 12 Chilton Drive, Paraparaumu.6152
ZL2ABW	Steer, D. W., 24 Dorset Avenue, New Plymouth.4601
ZL2ABX	Bishop, R. T., 1 Bowling Road, Greenmeadows, Napier.4001
ZL2ABY	Huggard, J. D., 22a Rimu Street, New Plymouth.4601
ZL2ABZ	Moore, J. A. W., 42 Wright Street, Wellington.6002
ZL2ACA	Barnett, W. J., R.D. 1, Mapua, Upper Moutere.7150
ZL2ACB	Pengelly, A. P., 56 Wilberforce Street, Miramar, Wellington.6003
ZL2ACC	Sutherland, J. M., 600 Pepper Street, Hastings.4201
ZL2ACD	Corric, R. D., 35 Fox Street, Opunake.4653
ZL2ACE	Greene, R. P., 5 Aranui Avenue, Castlecliff, Wanganui.5003
ZL2ACF	Stagpoole, V. M., 49 Bould Street, Johnsonville.6004
ZL2ACG	Glassey, R. B., 422 Jackson Street, Petone.6303
ZL2ACH	Robertson, B. R., 537 Ruahine Street, Palmerston North.5301
ZL2ACJ	Watson, J. S., 24 Gardener Street, Levin.5500
ZL2ACK	Brown, R. W. N., 9 Duke Street, Pahiatua.5471
ZL2ACL	Myhill, J., 14 Stanton Crescent, Christchurch.8002
ZL2ACM	Gore, C., Roberts Line, Bunnythorpe, R.D. 8, Palmerston North.5321
ZL2ACN	Lakeman, D. T., 55a Manuka Street, Masterton.5901
ZL2ACO	Jeffs, D. E., 132 Hill Road, Belmont, Lower Hutt.6301
ZL2ACP	Brosnan, V. W., R.D. 3, Waipawa.4175
ZL2ACS	Mai, G. A., 20 Cardiff Road, Pakuranga, Auckland.1706
ZL2ACT	Smith, G. F., 26 Sheridan Crescent, Upper Hutt.6401
ZL2ACU	Finlay, P. A., 154 Parkvale Road, Karori, Wellington.6005
ZL2ACW	Gotlieb, R., 6 Holborn Drive, Stokes Valley.6306
ZL2ACX	Hart, F. M., 82 Oriel Avenue, Tawa.6203
ZL2ACY	Hewett, E. S., 8 Fitzroy Flats, Fitzroy Street, Feilding.5600
ZL2ACZ	Bickerstaff, R. R., 12 Enfield Road, Napier.4001
ZL2ADA	Anderson, J. K., 68 Kurupae Road, Taupo.3300
ZL2ADB	Barrow, G. W. B., 60 Bledisloe Crescent, Wainuiomata.6305
ZL2ADC	Weston, W. F., 35 Kummer Crescent, Masterton.5901
ZL2ADD	Lund, O. M., 1 Cherry Grove, Strathmore.6003
ZL2ADE	Turner, A. L., 108a Hillcrest Road, Raumati Beach.6150
ZL2ADG	Donovan, G. J., 7 Marine Parade, Paraparaumu.6152
ZL2ADH	Boyd, I. McL., 132 Wainuiomata Road, Wainuiomata.6305
ZL2ADI	Blackwood, R. L., 2 Sommerville Terrace, Tawa, Wellington.6203
ZL2ADJ	Billing, H. B., 8 Witako Street, New Plymouth.4601
ZL2ADK	Purdie, C. M. (Mrs), 65 Hedges Street, Sanson.5450
ZL2ADL	Gilbert, T. J., 5A Newbourne Crescent, Blenheim.7301
ZL2ADM	Smith, I. G., Hill View, 94 Guppy's Road, Greenmeadows, Napier.4001
ZL2ADN	Stuart, J. D., 11 Kipling Street, Palmerston North.5301
ZL2ADO	Wilkinson, J., 69a Park Road, Carterton.5951
ZL2ADP	Vile, M. E., 12 Hicks Crescent, Waikanae Beach.6150
ZL2ADR	Burley, C. J., 37 Pope Street, Camborne, Plimmerton.6250
ZL2ADT	Brown, W. C., 9 Rawhiti Street, Nelson.7001
ZL2ADU	Gorton, H. J., 166 Tasman Street, Opunake.4653
ZL2ADV	Hodges, W., 317 Suffolk Road, Stoke, Nelson.7001
ZL2ADW	West, J. D., 17 Chesney Street, Bell Block, New Plymouth.4601

ZL2ADY	Gallagher, B. G., 84 Thomas Street, Stokes Valley, Lower Hutt.6306
ZL2ADZ	Renner, W. G., c/- Post Office, Ormond.3870
ZL2AFA	Rae, A. O., 38 Newbury Street, Palmerston North.5301
ZL2AFB	Burr, A. J., 25 Waiwera Place, New Plymouth.4601
ZL2AFC	Burr, M. K., 48 Holborn Drive, Stokes Valley.6306
ZL2AFE	Clarkson, R. J., 13 York Street, Eltham.4751
ZL2AFF	King, F. B., Patons Rock, Takaka.7172
ZL2AFG	Gentry, L. R., Parkhill Road, R.D. 2, Hastings.4221
ZL2AFI	Nicholls, G. A., 465 Ruahine Street, Palmerston North.5301
ZL2AFJ	Simpson, M. C., 14 Montrose Drive, Nelson.7001
ZL2AFK	Ford, P. L., 36 Akatea Road, Korokoro, Petone.6303
ZL2AFL	Jordan, N., 12 Caesars Place, Churton Park, Wellington.6004
ZL2AFM	Hawke, P. D., 91a Tipahi Street, Nelson.7001
ZL2AFN	MacLean, A. K., Hukaroa Road, Raetihi.5172
ZL2AFO	Burney, R. J., 115 Kowhai Street, Naenae, Lower Hutt.6301
ZL2AFP	Wassilieff, C., 69 Tiber Street, Island Bay, Wellington.6002
ZL2AFQ	Lawson, E. J., 22 Bryon Street, Upper Hutt.6401
ZL2AFR	Gorman, B. D., 66 Pacific Street, Timaru.8601
ZL2AFS	Chew, L. R., 87 Ngamotu Road, New Plymouth.4601
ZL2AFT	Anderson, B. P., 429 Albert Street, Palmerston North.5301
ZL2AFU	Udy, H. A. F., 1 Tudor Road, Pahiatua.5471
ZL2AFV	Titahi Bay Branch NZART (Inc.), see Branch Directory
ZL2AFW	Jones, B. N., 13 Taupata Street, Castlecliff, Wanganui.5003
ZL2AFX	Newton, R. J., R.D. 2, Blenheim.7321
ZL2AFY	Smith, I. M., Hinerangi Road, Hatuma, R.D. 1, Waipukurau.4176
ZL2AFZ	Studd, G. C., 70 Russell Street, Napier.4001
ZL2AGB	Martelletti, G. P., 44 Kapuni Street, Manaia.4851
ZL2AGC	Waldmann, K. J., 20 Tawai Street, Upper Hutt.6401
ZL2AGD	Kampkes, B., 135 Main Road, Bay View, Napier.4001
ZL2AGE	Mouritsen, J., 14 Ashridge Road, Napier.4001
ZL2AGH	Marshall, A. W., 32 Plymouth Road, Hastings.4201
ZL2AGI	Giles, F. A., 1006 Sussex Street, Hastings.4201
ZL2AGJ	Coatham, S. P., 11 Sherwood Street, Otumoetai, Tauranga.3001
ZL2AGL	Livingston, R. P., Palmers Road, R.D. 1, Brightwater.7151
ZL2AGM	Weaver, D. B., 6 Tankersley Crescent, Masterton.5901
ZL2AGN	Thompson, J. B., 50 Collingwood Street, Palmerston North.5301
ZL2AGO	Wolf, J. M., 12 Celeste Place, Glenfield, Auckland.1310
ZL2AGP	Weir, D. G., 4 St. Francis Grove, Lower Hutt.6301
ZL2AGQ	Cleveland, F. L., 38 Havelock Street, Mornington, Wellington.6002
ZL2AGR	Williams, R. L., 15 Pinney Avenue, Lower Hutt.6301
ZL2AGS	Gotlieb, G. D. (Mrs), 6 Holborn Drive, Stokes Valley.6306
ZL2AGU	Steel, G. J., Corner Arataki and Te Mata Roads, Havelock North.4201
ZL2AGW	Gillon, K. R., 16 Te Whiti Grove, Korokoro, Petone.6303
ZL2AGX	Young, B. D. (Mrs), 97 Rosetta Road, Raumati South.6150
ZL2AGY	Marr, A. H., 3 Crown Hill, Titahi Bay, Wellington.6202
ZL2AGZ	Grey, P. S., 3/211 Windsor Avenue, Hastings.4201
ZL2AHA	Wards, I. J., Manutahi, R.D. 2, Patea.5181
ZL2AHB	Douglas, L. S., 16 Ngaio Road, Waikanae.6154
ZL2AHC	White, S. J., 20 Henley Crescent, Napier.4001
ZL2AHD	Fowler, M. F., 3 North Esk Street, Nelson.7001
ZL2AHE	Wilson, A. J., 30 Adventure Drive, Whitby, Porirua.6201
ZL2AHF	Dodson, A., 33 Cluny Road, Plimmerton.6251
ZL2AHH	Keong, P. W., cnr Thompson & Davidson Roads, Havelock North.4201
ZL2AHI	Meads, A. M., 272 High Street, Eltham.4751
ZL2AHJ	Ward, J. D., 9/280 Grey Street, Palmerston North.5301
ZL2AHK	Knofflock, T. C., 41 Scotland Street, Picton.7372
ZL2AHL	Harris, F. C., 53 Fairs Road, Milson, Palmerston North.5301
ZL2AHM	Smith, R. A., 121 Slacks Road, Palmerston North.5301
ZL2AHN	Ashley, R. A., Te Horo Beach Road, R.D. , Otaki.6171
ZL2AHO	Owen, D. W., 12 Whirinaki Street, Upper Hutt.6401
ZL2AHR	Hawtree, G. R., 50 Fox Road, Wanganui.5001
ZL2AHS	Dallas, S., 96 Te Anau Road, Wellington.6003
ZL2AHT	Frost, H. A., 77 Meanee Road, Taradale, Napier.4001
ZL2AHU	O'Hara, E. R., "Omega", Ngaumu Road, R.D. 10, Masterton.5921
ZL2AHX	Greaney, E. C., 168 Waghorne Street, Napier.4001
ZL2AHY	Howard, C. B., 24b Clearmont Crescent, New Plymouth.4601
ZL2AIA	Steele, R., 30 Miller Road, Mangere Bridge, Auckland.1701
ZL2AIB	Campbell, W. A., 225a Tukapa Street, New Plymouth.4601
ZL2AIC	Drogemuller, C. H., 25d Egmont Street, Wanganui.5001
ZL2AID	Williams, P. R., 432 Manawapou Road, Hawera.4800
ZL2AIE	Parker, W. J., 213 Redwood Street, Blenheim.7301
ZL2AIG	Catt, G. D., 11 Taverner Street, Carterton.5951
ZL2AIH	Harding, A. G. F., 6 Bowline Place, Whitby, Porirua.6253
ZL2AIJ	Newbery, M. D., 35 Crofton Road, Ngaio, Wellington.6004
ZL2AIK	Smyth, W. M., 49c Doralto Road, New Plymouth.4601
ZL2AIL	McManaway, P. H., R.D. 1, Matarawa, Carterton.5951
ZL2AIN	James, L. A., 110 Redwood Street, Blenheim.7301
ZL2AIO	Voss, R. B., Mill Road, Kopane, 6 R.D. , Palmerston North.5321
ZL2AIP	Curry, R. G., 1 Flaxmere Street, Waikanae.6150
ZL2AIQ	Harvey, S. C., 802 Clive Street, Hastings.4201
ZL2AIR	Morris, S. W., Main Highway, Clareville, Carterton.5951
ZL2AIS	Cramer, F. H., 34 James Street, Inglewood.4651
ZL2AIT	Whiting, P. C., 91 St Andrews Road, Plimmerton.6251
ZL2AIV	Mitchell, W. J., 52 Locking Street, Nelson.7001
ZL2AIW	Sutherland, I. R., 4 Watchorn Place, Foxton Beach.5552
ZL2AIX	Gemmell, A. F., 39 Clippell Street, Titahi Bay, Porirua.6202
ZL2AIY	Hunter, D. R., 16 Torlesse Street, Wakatu, Nelson.7001
ZL2AIZ	Wright, L. L., 30 Discovery Drive, Whitby. Paramata.6253
ZL2AJA	Plum, B. F., 6 Porritt Place, Stoke, Nelson.7001
ZL2AJB	Hodge, L. D., 23 Kent Crescent, Palmerston North.5301
ZL2AJC	Hulse, R. L., 24 Hautana Square, Lower Hutt.6301
ZL2AJD	Dodds, J. F., 13 Waiheke Street, Waikanae.6154
ZL2AJE	Carpenter, E. D., 27 Canterbury Street, Tamatea, Napier.4001
ZL2AJF	Vernon, J. H., 130 Mairangi Road, Wellington.6001
ZL2AJG	Giblin, A. G., 27 West Avenue, Richmond, Nelson.7001
ZL2AJH	Andrewes, L. M., 45 Burrows Avenue, Karori, Wellington.6005
ZL2AJI	Aston, A. G., 98 Hine Road, Wainuiomata.6305
ZL2AJJ	McHardy, R. A., 762 Gladstone Road, Gisborne.3801
ZL2AJK	Martin, E. O., 32 Frederick Street, Lower Hutt.6301
ZL2AJL	Sutherland, D. C., 23 Peakes Road, Wanganui.5001
ZL2AJM	Donovan, M. F., 16 Ngaio Road, Waikanae.6154
ZL2AJN	Heinz, D. P., 56 Tukuka Street, Nelson.7001
ZL2AJP	Vartha, I. R., 7 Collett Street, Lower Hutt.6301
ZL2AJQ	Compier, J. C., 35 Endcliffe Road, Gisborne.3801
ZL2AJR	Teward, G. J., 26 Horopito Road, Waikanae.6154
ZL2AJV	Small, I. R., 207 Tudor Avenue, Hastings.4201
ZL2AJW	Marston, K., 119 Devon Street, Rotorua.3201
ZL2AJX	Moore, K. J., 54 Herbert Avenue, Palmerston North.5301
ZL2AJY	Donoghue, R. H., 10 Finnimore Terrace, Wellington.6002
ZL2AJZ	Wellington Polytechnic Radio Club, (Trustees: R. Stevens, S. Swan, S. Adams), c/- School of PETE, Private Bag, Wellington.6020
ZL2AKA	Ribbon, C. E., 34 Abbott Street, Gisborne.3801
ZL2AKB	Keik, C. E., 460 Frankley Road, R.D. 1, New Plymouth.4621
ZL2AKC	Larkin, J. F. L., 16 Hackett Street, Wanganui East.5001
ZL2AKD	Faulding, R. G., 5 Manuka Street, Palmerston North.5301
ZL2AKE	Watson, M. B., 25 Armagh Terrace, Marton.5151
ZL2AKF	Peffers, W. F., 57 Kakariki Grove, Waikanae.6154
ZL2AKG	McGonigal, J. W. R., 17 Surrey Street, Taradale, Napier.4001
ZL2AKH	Hayward, W. B., 23 Mt Vernon Place, Nelson.7001
ZL2AKI	Moles, G. J., 5 Edward Street, Bulls.5452
ZL2AKJ	Freeth, C. A., 56 Fifeshire Crescent, Nelson.7001
ZL2AKK	Moss, J. B., 9 Seyton Street, Stratford.4700
ZL2AKL	Howard, W. S., c/- Post Office, Bunnythorpe.5453
ZL2AKM	Glassey, R. B., c/- University Hall, Maidstone Road, Christchurch.8004
ZL2AKN	Smith, L. K., Main Road, S H 2, Bethlehem, Tauranga.3001
ZL2AKO	Oakley, J. W., Slipstream, Reikorangi Road, Waikanae.6154
ZL2AKP	Hunt, C. L., 30 Raglan Avenue, Palmerston North.5301
ZL2AKQ	Littleford, R. H., 39 Woodvale Grove, Lower Hutt.6300
ZL2AKR	Roberts, E., 116 Kowhai Street, Lower Hutt.6301
ZL2AKS	Taylor, D., 31 Ahuriri Street, Wellington.6003
ZL2AKT	Bundle, R. J., 12 Mahoe Street, Linden, Wellington.6203
ZL2AKU	Crosby, B. D., 28 Sheridan Crescent, Upper Hutt.6401
ZL2AKV	Copeland, R. N., P.O.Box 40-525, Upper Hutt.6400
ZL2AKW	King, T. C., 72 Chelmsford Street, Wellington.6004
ZL2AKX	Morris, E. C., 3 Peel Place, Wainuiomata.6305
ZL2AKY	Comber, C. M., 54 Reid Avenue, Hawera.4800
ZL2AKZ	Barden, T. W. A., Paradise Road, Coopers Beach, Northland.0557
ZL2ALA	Kenny, A. R., 60 Pokohiwi Road, Normandale, Lower Hutt.6301
ZL2ALB	Broadbent, N. D., R.D. 20, Ohau, Levin.5500
ZL2ALC	Maxwell, H. J., 7 Rakeiora Grove, Korokoro, Petone.6303
ZL2ALD	Gillespie, M. E., Onahau Bay, Picton.7372
ZL2ALE	Roberts, A. L., Durham Drive, Havelock North.4201
ZL2ALF	Marr, Y. E., 3 Crown Hill, Titahi Bay.6202
ZL2ALG	Fredericksen, C. A., 18 Champion Terrace, Nelson.7001
ZL2ALH	Imlay, B. W., 46 Tilbury Street, Lower Hutt.6301
ZL2ALI	Clark, E. A., 88 Mallberry Road, Mangere East, Auckland.1701

ZL2ALJ	Fletcher, A. B., 127 Melbourne Road, Island Bay, Wellington.6002
ZL2ALK	Borlase, R. C., 289 Fitzherbert Avenue, Palmerston North.5301
ZL2ALL	Tompkins, A. W., Rangiwahia, R.D. 54, Kimbolton.5653
ZL2ALM	Lovegrove, P. J., 145 Carlisle Road, Browns Bay, Auckland.1310
ZL2ALN	Broderick, T. E., 173 Hill Street, Richmond, Nelson.7002
ZL2ALO	Shearman, A. J., 15 Swainson Street, Naenae.6301
ZL2ALP	Paton, P. J., 41 Hyde Street, Wainuiomata.6305
ZL2ALQ	Appleton, J. W., 17 Bone Crescent, Hawera.4800
ZL2ALR	Jury, J. M., "Glendower", Ponatahi Road, R.D. 2, Carterton.5951
ZL2ALS	Morris, R. A., 16 Bristol Square, Lower Hutt.6301
ZL2ALU	Turnham, P. E., 243 Waterloo Road, Lower Hutt.6301
ZL2ALW	Barnett, L. J., Manuhara Road, R.D. , Pongaroa.5472
ZL2ALX	Tarrant, G. W., Rawhitirua, R.D. 8, Masterton.5921
ZL2ALY	Walker, C. M., Flat 1, 21 Dorking Road, Wellington.6002
ZL2ALZ	Healey, G. W. R., 78 Sidlaw Street, Strathmore Park, Wellington.6003
ZL2AMA	Flack, A. B., 17 Turriff Crescent, Tawa, Wellington.6203
ZL2AMB	Chinery, P. R. J., 192 High Street, Eltham.4751
ZL2AMC	Sargent, F. W., 56 Hurford Road, R.D. 4, Omata, New Plymouth.4621
ZL2AMD	Lamont, D. H., 510 Kennedy Road, Napier.4001
ZL2AME	Heath, C. A., 9 Patutu Grove, Upper Hutt.6401
ZL2AMF	Wilson, G. R. S., 38 Hetherington Road, Swanson, Auckland.1230
ZL2AMG	Wensley, L. A., Beach Road, Motueka.7161
ZL2AMH	Dew, E. E., 55a McHardy Street, Havelock North.4201
ZL2AMI	Stewart, R. G., 105 Orangi Kaupapa Road, Wellington.6005
ZL2AMJ	Johnson, J. F. C., 15 Field Street, Upper Hutt.6401
ZL2AMK	Vendt, G. R., 60 Bird Grove, Stokes Valley.6306
ZL2AML	Warner, T. R., 32 Endeavour Street, New Plymouth.4601
ZL2AMM	Morris, S. J., 1 Sidlaw Street, Strathmore, Wellington.6003
ZL2AMN	IBM Amateur Radio Club, (Trustee ZL2BDW), Postal address: P.O. Box 3343, Wellington.6000
ZL2AMO	Spackman, M. L., 2/168 Gloucester Street, Taradale, Napier.4001
ZL2AMP	Fretter, M. E., R.D. 2, Wanganui.5021
ZL2AMQ	Nicholls, C. A., 135 Benmore Avenue, Palmerston North.5301
ZL2AMR	Feilding and Districts Radio Club, see Branch Directory
ZL2AMS	Marton Branch NZART (Inc.), see Branch Directory
ZL2AMT	Garmonsway, T. L., "Hiria" Rangiwaea, R.D. 1, Taihape.5163
ZL2AMU	Ashe, D. A., 34 Wai-iti Crescent, Lower Hutt.6301
ZL2AMV	Mudford, D. W., 58 Le Quesne Road, Bay View, Napier.4151
ZL2AMX	Gardner, K. D., 19 Hiropi Street, Newtown, Wellington.6002
ZL2AMY	Davies, D. D., 71 Thurleigh Grove, Karori, Wellington.6005
ZL2AMZ	Humphris, G. J., 18 Horokiwi Road, Newlands, Wellington.6004
ZL2ANA	Neilson, A. K., 13 Matene Street, Otaki.6171
ZL2ANB	Fenton, F. A., 27 Blake Street, Waitara.4656
ZL2ANC	Watkins, W. T., 218 St. Aubyn Street, New Plymouth.4601
ZL2AND	Wallace, R. I., 21 Fox Street, Featherston.5952
ZL2ANE	Cooney, J. L., 53 Wainuiomata Road, Wainuiomata.6305
ZL2ANG	Tipler, B. F., Mangaeho Road, R.D. 22, Stratford.4700
ZL2ANI	McLeod, S. A., 4 Trevelyan Street, Onekawa, Napier.4001
ZL2ANJ	McNabb, G. M., 91 Trewavas Street, Motueka.7161
ZL2ANL	McNeill, J. H., 19 Russell Street, Marton.5151
ZL2ANP	Williamson, J. J., Waituna, 9 R.D. , Feilding.5600
ZL2ANQ	Keane, P. M.(Rev), 61 Main Road, Makaraka, Gisborne.3801
ZL2ANR	Robertson, J., 100 Cluny Road, Plimmerton.6251
ZL2ANS	Martin, D. W., 111 Avenue Road, Greenmeadows, Napier.4001
ZL2ANT	Thomas, A., 35 Three Mile Bush Road, Kamo, Whangarei.0101
ZL2ANU	Bennett, K. P., 44b Wither Road, Blenheim.7301
ZL2ANW	White, R. W., 10 Wairere Road, Wanganui.5001
ZL2ANX	Central Institute of Technology Radio Club, (Trustee: ZL2ABQ), CIT Students Union (Inc), Somme Road, Heretaunga.6402
ZL2ANY	Williams, C. F., 4 Wilson Street, Hawera.4800
ZL2ANZ	Barber, V. L., 36 Roslyn Road, Napier.4001
ZL2AOA	Wall, T. F., Mahaki, R.D. 1, Martinborough.5954
ZL2AOB	Parker, D. T., 7 Darwin Road, Gisborne.3801
ZL2AOC	Hamilton, A. M. M., 39 Ngaio Road, Kelburn, Wellington.6005
ZL2AOD	Catterall, J. A., 93 Parkers Road, Tahunanui, Nelson.7001
ZL2AOE	Wood, T. E., 12 Rerewe Grove, Oaklands, Upper Hutt.6401
ZL2AOF	Reardon, V. W., Autler Road, Manaia.4851
ZL2AOG	Green, G. R., 7 Russell Street, Marton.5151
ZL2AOI	Malkin, E., 1007 Konini Street, Hastings.4201
ZL2AOJ	Ryder, S. F., 67 Gillespies Road, Upper Hutt.6401
ZL2AOK	Wallis, G. A., 23 Bruce Avenue, Brooklyn, Wellington.6002
ZL2AOL	McBeth, D. O., 103 Poplar Grove, New Plymouth.4601
ZL2AOM	McGrath, R. L., 104 Kulim Avenue, Tauranga.3001
ZL2AON	Crossley, R. S., Flemington Road, Wanganui.5001
ZL2AOO	Sinclair, M. L., 1 Porritt Place, Tamatea, Napier.4001
ZL2AOP	Mackintosh, A. B., 34 Marian Drive, Gisborne.3801
ZL2AOR	Langevad, M. W., Grahams Beach Road, R.D. 4, Waiuku.1852
ZL2AOU	Howan, V. E. (Mrs), 7 Almora View, Ascot Park, Porirua.6201
ZL2AOV	McNeill, D. A., 58 Fraser Avenue, Johnsonville, Wellington.6004
ZL2AOW	Purvis, R. H., 23 Graham Street, Auckland.1001
ZL2AOX	Edwards, M. R., 92 Creswick Terrace, Northland, Wellington.6005
ZL2AOZ	Davidson, W. E., No. 10 R.D. , Palmerston North.5321
ZL2APA	Chippendale, J. G., 66 Reid Avenue, Hawera.4800
ZL2APB	Plank, E. W., 182 Bridge Street, Bulls.5452
ZL2APC	Burton, H., 34 Hathaway Avenue, Karori, Wellington.6005
ZL2APD	Holmwood, E. A., 11 Newton Place, Palmerston North.5301
ZL2APE	Parnell, J. C., 87 Duncan Terrace, Wellington.6003
ZL2APF	Lusty, F. W., 40 Ihaia Street, Waitara.4656
ZL2APG	Sutherland, N., 30 Paremata Street, Nelson.7001
ZL2APH	Haisman, R. A., 27 Valley Road, Gisborne.3801
ZL2API	Gillette, H. C., 6 Mahoe Avenue, Palmerston North.5301
ZL2APJ	Vaughan, R. G., 205 Rosetta Road, Raumati Beach.6150
ZL2APK	Campbell, E. P., 823 Cook Place, Hastings.4201
ZL2APL	Westwood, I. J., 25 Raukawa Street, Himatangi Beach.5550
ZL2APM	Parker, T. C., 5 Damian Grove, Lower Hutt.6301
ZL2APO	Leigh, P., 94 South Karori Road, Wellington.6005
ZL2APQ	Aydon, A., 71 Weka Street, Nelson.7001
ZL2APR	Pope, T. J., 80 Victoria Street, Carterton.5951
ZL2APS	Sullivan, D. H., 56 Keepa Street, Levin.5500
ZL2APT	Ropata, P. T., 11 Kittyhawk Row, Bulls.5452
ZL2APV	Jury, G. V., 529c Carrington Road, R.D. 1, New Plymouth.4621
ZL2APW	Nugent, R. F., Clairvale Farm, R.D. 2, Omaka, Blenheim.7321
ZL2APX	O'Dwyer, M., 135 Guppy Road, Taradale, Napier.4001
ZL2APY	Hartwig, G., 66 Lincoln Street, Ashhurst.5301
ZL2APZ	Benson, K. J., 14 Regent Place, New Plymouth.4601
ZL2AQA	Allen, D. B., 1 Brookes Terrace, Waitara.4656
ZL2AQC	Doyle, D., 47 Cashmere Avenue, Khandallah, Wellington.6004
ZL2AQD	Watson, J. E., 50 Ellesmere Avenue, Miramar, Wellington.6003
ZL2AQE	Shorland, J. H., 12 Lenox Grove, Johnsonville, Wellington.6004
ZL2AQF	Ward, J. G., Akaroa Road, P.O.Box 74, Pongaroa.5472
ZL2AQH	Voss, S. J., Mill Road, Kopane, 6 R.D. , Palmerston North.5321
ZL2AQI	Cheyne, J. A., 12 Aberdeen Avenue, Palmerston North.5301
ZL2AQK	Millard, A. J., 34 Volga Street, Wellington.6002
ZL2AQL	Spearman, M. B., 5 Climie Crescent, Hawera.4800
ZL2AQN	Heald, P. J., 12 Atarau Grove, Paraparaumu.6152
ZL2AQO	Wilson, K. A. (Mrs), 80 Wycliffe Street, Onekawa, Napier.4001
ZL2AQP	Clouston, T. W., 28 Fox Street, Opunake.4653
ZL2AQQ	Ammundsen, J. G., 17 Satara Crescent, Khandallah, Wellington.6004
ZL2AQR	Crawley, R. J. C., 1018 Totara Street, Hastings.4201
ZL2AQS	Duckworth, P. D., 7 Einstein Street, Gisborne.3801
ZL2AQT	Benton, S. W., "Wainawhenua", Kahautara Road, R.D. 1, Featherston.5952
ZL2AQU	Anderson, G. W. J., 32 Chichester Drive, Silverstream.6402
ZL2AQW	Laing, D. J. H., 6 McDonald Street, Taita, Lower Hutt.6301
ZL2AQX	Macartney, R. A., 7 Fromont Street, Wanganui.5001
ZL2AQY	Olson, E. L., 58 Titania Street, Stratford.4700
ZL2AQZ	Edgecombe, C. J., Ngawhini Road, Ararata, R.D. , Hawera.4800
ZL2ARB	Davis, J., 19 Titoki Street, Gisborne.3801
ZL2ARC	Christie, R. F., 259 Cambridge Street North, Levin.5500
ZL2ARD	Schofield, D. T., 34 Kiwi Road, Raumati Beach.6150
ZL2ARE	Harris, L. W., 7 Cameron Road, Napier.4001
ZL2ARF	Lane, J. R., c/- Electricorp, R.D. 3, Napier.4021
ZL2ARG	Nelson Branch NZART (Inc), see Branch Directory
ZL2ARH	Henderson, M. J., c/- 1 Awarua Crescent, Havelock North.4201
ZL2ARI	Wills, A. J., 73 Donovan Road, Paraparaumu.6152
ZL2ARK	Wilkins, R. R., Iona Road, Havelock North.4201
ZL2ARL	Prior, R. T., 28 Shelley Street, Palmerston North.5301
ZL2ARM	Peel, J. S., 19 The Esplanade, Westshore, Napier.4001
ZL2ARN	Stewart, D. G., 1 Edgewater Street, Waikanae.6154
ZL2ARP	Collins, R. J., "L'Chayim", Peka Peka Road, R.D. 1, Waikanae.6154

ZL2ARQ	Pahl, D. G., Dee Road, R.D. 1, Upper Moutere.7152
ZL2ART	McQuinlan, T., 6 Whanake Street, Titahi Bay.6202
ZL2ARV	Black, R. C., 25 Marsden Road, Stoke, Nelson.7001
ZL2ARW	Williams, P. R., 15 Pinny Avenue, Lower Hutt.6301
ZL2ARX	Pomfret-Brown, G. E., 29 Bishopdale Avenue, Stoke, Nelson.7001
ZL2ARY	Jenks, M. D., 34 Waitaki Street, Christchurch.8007
ZL2ARZ	Collins, J. L., 8 Marine Parade, Wairoa.4192
ZL2ASA	Dinsdale, B., 14 Benmore Avenue, Palmerston North.5301
ZL2ASB	Anderson, N. H., 109 Aro Street, Wellington.6002
ZL2ASC	Denton, R. J., 17 Rangiora Terrace, Tahunanui, Nelson.7001
ZL2ASD	Darby, A. R., 47 McLaren Street, R.D. 1, Mangaroa.6421
ZL2ASE	Williams, R. B., 35 Trelawney Road, Wainuiomata.6305
ZL2ASF	Fogerty, S. F., 367 High Street, Motueka.7161
ZL2ASG	Waterall, T. H., 26 William Street, Hataitai, Wellington.6003
ZL2ASH	Clark, B. S., 5 Mamaku Grove, Khandallah, Wellington.6004
ZL2ASI	Law, A., 1 Kopara Grove, Stokes Valley.6306
ZL2ASJ	Major, J. E., 86 Quebec Street, Wellington.6003
ZL2ASK	Tuffnell, B. R., Flat 2, 31 Perth Street, Christchurch.8001
ZL2ASL	Leitch, J. H., Dudley Road, R.D. 6, Inglewood.4651
ZL2ASM	Glew, R. E., 58 Henderson Line, Marton.5151
ZL2ASO	Sewell, J. R., 57 Hine Road, Wainuiomata.6305
ZL2ASP	Colquhoun, T. R., 39 Melrose Road, Island Bay, Wellington.6002
ZL2ASQ	Dawson, E. K., 680 East Coast Road, Browns Bay, Auckland.1310
ZL2ASR	Gill, A. H., Middle Road, R.D. 11, Havelock North.4201
ZL2AST	Groombridge, J. E., 15 Oakleigh Street, Maungaraki, Lower Hutt.6301
ZL2ASW	Avery, G. S., Camerons Line, Feilding.5600
ZL2ASY	Currie, R. G., 75 Hair Street, Wainuiomata.6305
ZL2ASZ	Wardlaw, D. A., c/- NZART, Astral Towers, Upper Hutt.6401
ZL2ATA	Johnson, J. M. (Mrs), P.O.Box 174, Pahiatua.5471
ZL2ATB	Blackwell, F. N., 103 Kenmore Street, Newlands, Wellington.6004
ZL2ATC	Harris, E. J. (Mrs), 7 Cameron Road, Napier.4001
ZL2ATE	Manley, R. C., 22 Amberley Avenue, Palmerston North.5301
ZL2ATF	Dee, R. A., 13b Naseby Street, Merivale, Dunedin.9001
ZL2ATH	Erikson, A. M., 8a Cautley Street, Richmond.7002
ZL2ATI	Cartwright, K. C., 8 McNaughton Street, Waitara.4656
ZL2ATJ	Trye, M., 2/40 West Coast Road, Glen Eden, Auckland.1207
ZL2ATK	Williams, V. V. H. (Mrs), Atkins Road, Patutahi., P.O. Box 78, Gisborne.3800
ZL2ATL	Williams, C. M., Atkins Road, Patutahi., P.O. Box 78, Gisborne.3800
ZL2ATM	Aplin, E. L., 16 Kaka Street, Masterton.5901
ZL2ATO	Oborn, L. E., 91 Norton Park Grove, Lower Hutt.6301
ZL2ATP	Hursthouse, M. W.(Dr), 306 Princess Drive, Nelson.7001
ZL2ATS	Huberts, G. H., 46 Lysnar Street, P.O. Box 6, Gisborne.3800
ZL2ATT	Thompson, A. J., 11 London Terrace, Palmerston North.5301
ZL2ATU	Horn, I. G., 79 Thatcher Street, Castlecliff, Wanganui.5003
ZL2ATV	Clench, H. J., 13 Ilam Grove, Kelson, Lower Hutt.6301
ZL2ATW	Lang, W. J., 138 Buick Crescent, Palmerston North.5301
ZL2ATX	Haskell, E. H. E., 124 Taupo View Road, Taupo.3300
ZL2ATZ	Shortall, J. P., 82 Menin Road, Onekawa, Napier.4001
ZL2AUA	Burch, M. A. G., 8 Lochiel Road, Khandallah, Wellington.6004
ZL2AUB	Moore, P. J., 54 Herbert Avenue, Palmerston North.5301
ZL2AUC	Keegan, R. J., 11 Malaghan Grove, Johnsonville, Wellington.6004
ZL2AUD	Martin, W., 4 Bella Grove, Naenae, Lower Hutt.6301
ZL2AUE	King, M., Flat 21, 10#12 Austin Street, Wellington.6001
ZL2AUF	Blair, S. G., 15 Poplar Grove, Thorndon, Wellington.6001
ZL2AUH	O'Shea, P. F., 39 Folkestone Drive, Flaxmere, Hastings.4230
ZL2AUI	Danrell, F. R., 1215 North Willowpark Road, Hastings.4201
ZL2AUJ	Catchpole, D., 25 Taipakupaku Road, Miramar, Wellington.6003
ZL2AUK	Leckie, D. A., 12 Pencarrow Crescent, Wainuiomata.6305
ZL2AUL	Bird, J. W., 131 Whites Line East, Lower Hutt.6301
ZL2AUN	Francis, L. J., 1 Worcester Street, Taradale, Napier.4001
ZL2AUO	Bould, J. R., Flat 1, 42 Chelwood Street, Palmerston North.5301
ZL2AUR	Tong, Tse-Ying, 24 Flanders Avenue, Napier.4001
ZL2AUS	Stewart, B. E., 1 Caversham Road, Mosston, Wanganui.5001
ZL2AUT	Morton, L. W., 112 Union Street, Foxton.5551
ZL2AUV	Rockell, J. E., 2/10 Maimi Street, Mangere East, Auckland.1701
ZL2AUW	Nash, A. L. J., Honi Taipua Street, Manakau, Levin.5500
ZL2AUX	Lewer, D. H., 113 Pukepapa Road, Marton.5151
ZL2AUY	Murphy, N. J., 69 Ames Street, Paekakariki.6151
ZL2AUZ	Blair, R. L., 12 Cleland Street, Palmerston North.5301
ZL2AVA	McLauchlan, A. A. W., 81 Parker Avenue, Levin.5500
ZL2AVB	Hargreaves, A. P., 29 King Edward Street, Eltham.4751
ZL2AVC	McDermott, R. J. O., 35 Highbury Road, Kelburn, Wellington.6005
ZL2AVE	Fittis, A. H., 5 Tyndall Street, Pahiatua.5471
ZL2AVF	Gibbs, L. V., 19 Camellia Terrace, Lower Hutt.6301
ZL2AVG	Reynolds, M. G., P.O.Box 63, Porangahau Road, Waipukurau.4173
ZL2AVH	Chong, A. V., 240 Whirinaki Road, R.D. 2, Napier.4021
ZL2AVI	Savage, R. B., 2a Waverley Street, Richmond, Nelson.7002
ZL2AVJ	McNabb, M. D., Kina Beach Road, Tasman, R.D. 1, Upper Moutere.7152
ZL2AVK	Kane, D., 11 Bay Street, Petone.6303
ZL2AVL	Luscombe, G. W., Main Road, Waiouru.5164
ZL2AVM	Morris, R. H. C., 21 Rangoon Street, Khandallah, Wellington.6004
ZL2AVO	Davis, B. F., 45 Roto Street, Tahunanui, Nelson.7001
ZL2AVQ	Dement, F. W. H., 162 Bartholemew Road, Levin.5500
ZL2AVR	Dinnie, J. S., 27 Rodney Avenue, Te Horo Beach. Postal: P.O. Box 8, Te Horo.6170
ZL2AVS	Heath, B. O., 32 Nikau Street, Eastbourne.6304
ZL2AVT	Tremear, K. D., 12a Thynne Street, Foxton.5551
ZL2AVU	England, S. J., Villa 51, Masonic Village, Queen Street East, Levin.5500
ZL2AVV	Hewitt, I. R., 21 Camerons Line, R.D. 5, Feilding.5600
ZL2AVW	Carter, J. G., 10 Cracroft Street, Devonport, Auckland.1309
ZL2AVX	Rhodes, C. J., 54 Kempton Street, Greytown.5953
ZL2AVY	Owen, M. L., Main Road, Makara., P.O. Box 17048, Karori, Wellington.6033
ZL2AWA	Farquhar, W. E., 17 Stansell Avenue, Nelson.7001
ZL2AWB	Craigie, C. J., 45 Gillespies Road, Upper Hutt.6401
ZL2AWC	Wellington College Amateur Radio Club, (Trustee ZL2AOK), P.O.Box 16-073, Wellington.6030
ZL2AWE	Cooke, P., 31 Kent Crescent, Palmerston North.5301
ZL2AWF	Alexander, D. G., 34 Tennyson Street, Petone.6303
ZL2AWG	Roberts, J. C., 40 Grahams Road, Christchurch.8004
ZL2AWH	Brosnan, D. C., 120 Maddison Street, Hastings.4201
ZL2AWI	Sherley, H. F., 37 Kiwi Road, Raumati Beach.6150
ZL2AWJ	Woodhouse, C. W., 51 Houtana Street, Lower Hutt.6301
ZL2AWK	Wilson, L. G., 32d Bauchop Road, Lower Hutt.6301
ZL2AWL	McMillan, E. M., 6 Anthony Place, Bay View, Napier.4151
ZL2AWM	Macdonald, K. A., 68b Chatsworth Road, Upper Hutt.6401
ZL2AWN	Lewis, L. D., 20 Horopito Road, Waikanae.6154
ZL2AWO	Campin, J. W., 40 Trevola Street, Blockhouse Bay, Auckland.1207
ZL2AWP	Wills, A. E. (Mrs), R.D. 1, Karaka, Papakura.1733
ZL2AWR	Fox, M., 89 Cook Street, New Plymouth.4601
ZL2AWS	Sayers, P. A., 97 Happy Valley Road, Ohiro Bay, Wellington.6002
ZL2AWT	Hopwood, F. B., 109 Park Road, Palmerston North.5301
ZL2AWU	Tiller, B. A., 68 Donovan Road, Paraparaumu Beach.6153
ZL2AWW	Hawera Branch NZART (Inc.), see Branch Directory
ZL2AWY	Williams, D. M., 28 Highbury Avenue, Palmerston North.5301
ZL2AWZ	Faupel, S. K., 92 Reeves Road, Papakura Heights, Auckland.1706
ZL2AXB	Crawley, D. R. K., Campbell Road, R.D. 1, Wanganui.5021
ZL2AXC	Ragan, J. H., 45 Selwyn Crescent, Wanganui.5001
ZL2AXD	Belding, W. E., 30 Duke Street, Levin.5500
ZL2AXF	Widmer, J. B., Otaraoa Road, R.D. 43, Waitara.4656
ZL2AXG	Young, W. D. D., 20 Rexwood Street, Carterton.5951
ZL2AXI	Leslie, G., 35 Robinson Street, Foxton.5551
ZL2AXJ	Holdsworth, R., 3 Best Street, Wainuiomata.6305
ZL2AXK	Sommerville, W. V., 21 Bridge View Road, Birkenhead, Auckland.1310
ZL2AXL	Harvey, P. R., 4a Norton Road, Otumoetai, Tauranga.3001
ZL2AXM	Wilkins, S. J., 3 Kentucky Street, Upper Hutt.6401
ZL2AXN	Crane, R. G., 101 Anzac Parade, Wanganui.5001
ZL2AXO	Mathers, R. W., P.O. Box 54, Pohara Valley Road, Takaka.7172
ZL2AXP	Latta, I. K., 31 Collingwood Street, Palmerston North.5301
ZL2AXQ	Rowlands, R. E., 55 Fairview Crescent, Kelburn, Wellington.6005
ZL2AXR	Ramsay, K. A., 79 Yule Street, Lyall Bay, Wellington.6003
ZL2AXS	Bowden, B. A., 19 Margate Place, Flaxmere, Hastings.4201
ZL2AXT	Bremford, J. D., 9 Winston Street, Crofton Downs, Wellington.6004
ZL2AXU	Wharton, J. H., 14 Celia Street, Stratford.4700
ZL2AXV	Hulston, J. R., 7 Earlston Grove, Lower Hutt.6301
ZL2AXW	Andrew, P. J., 6 Eton Place, Palmerston North.5301
ZL2AXY	Devenport, J. A., 17 Sunny Grove, Wainuiomata.6305
ZL2AXZ	Goodfellow, D. R., 1/48 Menin Road, Raumati South.6150
ZL2AYA	Little, A. J., 7 Earl Street, Levin.5500
ZL2AYB	Fisher, W. G., 40 Beauchamp Street, Karori, Wellington.6005
ZL2AYC	Richards, H. J., 5 Meachen Crescent, Blenheim.7301

ZL2AYD Barker, B. A., Cole Street, Dannevirke.5491
ZL2AYE Wastney, R. J., 126 The Ridgeway, Stoke, Nelson.7001
ZL2AYF Amies, B. W., 20 Greer Crescent, Tawa.6203
ZL2AYG Bowden, R. E., 10 Kennedy Grove, Stokes Valley.6306
ZL2AYH Simpson, A. R., 6 Murray Avenue, Hawera.4800
ZL2AYI Brooks, J. D., Te Uru, Utuwai, R.D. , Ashhurst.5451
ZL2AYJ Visser, A., 72 McLeod Street, Upper Hutt.6401
ZL2AYK Kelly, R. W., 406 South Road, Hawera.4800
ZL2AYM Scholefield, C. O., Spring Grove, R.D. 1, Wakefield.7181
ZL2AYO Hurley, G., 19 Hillcrest Road, Raumati.6150
ZL2AYP Scarfe, T. W., P.O.Box 67, Greytown.5953
ZL2AYQ Hill, K. J., 27 Welland Place, Wellington.6002
ZL2AYR Kingston, B. L., 4/49 High Street, Renwick.7352
ZL2AYS Burton, H. C., 34 Stewart Street, Aramoho, Wanganui.5002
ZL2AYT Bolton, P. E., 27 Ariki Street, Lower Hutt.6301
ZL2AYU Leask, D. W., 11 Cannon Street, New Plymouth.4601
ZL2AYW Thwaites, C. L., 4 Brian Bary Street, Blenheim.7301
ZL2AYX Pohl, K. P., 58 Norton Park Avenue, Lower Hutt.6301
ZL2AYY Waghorn, T. J., 87 Chelmsford Street, Ngaio, Wellington.6004
ZL2AYZ Cousins, W. G., 1 Clinton Way, Wellington.6002
ZL2AZA Borrell, D., 5 Taupo Crescent, Plimmerton.6251
ZL2AZB McKay, D. K., 28 Eltham Road, Blenheim.7301
ZL2AZC Dunn, D. A., 1017a Frederick Street, Hastings.4201
ZL2AZE Stretch, F., 122 Muller Road, Blenheim.7301
ZL2AZG Dagg, R. I., 1009 Garry Street, Hastings.4201
ZL2AZH Noel, L. E. H., Humber Street, Rongotea.5454
ZL2AZI Boivin, R. A., 141 Winchester Street, Ashhurst.5451
ZL2AZJ Cole, A. G., 66 Ponsonby Road, Karori, Wellington.6004
ZL2AZK Lankshear, B. R., 222 Howick Road, Blenheim.7301
ZL2AZL Belt, G. J., Victoria Terrace, Ohau.5554
ZL2AZM Cooper, B. V., 3a Denbigh Square, Feilding.5600
ZL2AZN Walker, D. G., 16 Stephen Street, Johnsonville, Wellington.6004
ZL2AZP Pinny, H. G., 8 Wakefield Grove, Waikanae.6154
ZL2AZQ Davies, S. J., see overseas members
ZL2AZR Harris, M. G., 222 Main South Road, Paraparaumu.6152
ZL2AZS Bush, C. J. T., 363 Devon Street West, New Plymouth.4601
ZL2AZT Thomas, G. D., 10 Morning View, Titahi Bay.6202
ZL2AZV Stephen, J. M., 6 Legorne Lane, Havelock North.4201
ZL2AZW Thomson, E. M., 31 Rotokauri Road, Hamilton.2001
ZL2AZY Owen, S. C., Main Road, Makara.6203
ZL2AZZ Randall, J. H., 7a Sunny Glen, Waikanae.6154
ZL2BAC Osborne, T. G., 144 Matai Road, Raumati.6150
ZL2BAD Bennett, W. A., Tucker Road, R.D. 1, Gisborne.3821
ZL2BAE Searing, J. J., 6/51 Austin Street, Mt Victoria, Wellington.6001
ZL2BAF Donoghue, C. J., 33 Gracechurch Drive, East Tamaki, Auckland, R.D. Papatoetoe.1734
ZL2BAG Martin, P. J., Palmer Road, R.D. 29, Kaponga.4752
ZL2BAH Mace, R. R., Main South Road, R.D. 4, Omata, New Plymouth.4621
ZL2BAI Garth, D. J., Te Koawa Station, R.D. 2, Te Karaka, Gisborne.3821
ZL2BAJ Blackley, D., 116 Darlington Road, Miramar, Wellington.6003
ZL2BAK Douglas, R. J., 507 Riverside Drive North, Lower Hutt.6301
ZL2BAL Laing, A. J., 21 Napier Road, Ashhurst.5451
ZL2BAM Durdle, B. M., 27a Montana Place, New Plymouth.4601
ZL2BAN Davison, G., Forlongs Road, R.D. 7, Feilding.5600
ZL2BAO Wilson, J. E., 20 James Foley Avenue, Napier.4001
ZL2BAQ Carr, P. H., 17 Timaru Grove, Kelson, Lower Hutt.6301
ZL2BAR Allardice, M. H., 49 Raykott Terrace, Khandallah, Wellington.6004
ZL2BAS Longly, S. McL., 6a Lambton Road, Napier.4001
ZL2BAT Ramage, B. H., 95 Gossamer Drive, Pakuranga.1706
ZL2BAU Mallett, P. J., 22 Meehan Street, Blenheim.7301
ZL2BAV Ruddle, D. J., St. Andrews College, Papanui Road, Christchurch.8005
ZL2BAW McCarron, J. R., 24 Marewa Road, Hataitai, Wellington.6003
ZL2BAY Elvy, S. J., 5b Mountain View Road, Blenheim.7301
ZL2BAZ Forrester, I. J., 3 Duncraig Road, Silverstream, Upper Hutt.6402
ZL2BBA Rundle, W. J., 67 Rimu Road, Raumati.6150
ZL2BBC Belmont Scout Group HQ, (Trustee ZL2BAQ), 6 Fantail Grove, Belmont, Wellington.6301
ZL2BBD Urwin, H. C. R., 14 Brook Street, Nelson.7001
ZL2BBE Tolley, H. G. R., 1 Kauri Grove, Lansdowne, Masterton.5901
ZL2BBF Feickert, B., 9 Pioneer Grove, Silverstream, Upper Hutt.6401
ZL2BBG Withers, F. R., 19 Brassey Road, Wanganui.5001
ZL2BBH Jansen, J. H., 1 Pufflett Road, Havelock North.4201
ZL2BBJ Corney, A. C., 43 Clutha Avenue, Wellington.6004
ZL2BBK Hislop, S. J. K., See Overseas Members.
ZL2BBL Barwick, L. G. A., 25 Wades Avenue, Christchurch.8002
ZL2BBM Black, E. G., 9 Tudor Court, Paraparaumu Beach.6153
ZL2BBN Finch, B. P., 142 Brooklands Road, New Plymouth.4601
ZL2BBO Lealand, T. P., 16a Hunter Street, Hawera.4800
ZL2BBP Childs, P. L., 30 Snowdens Crescent, Blenheim.7301
ZL2BBQ Edgar, M. M., 16 St Clio Street, Ilam, Christchurch.8004
ZL2BBS Doig, A. M., 68 Arlie Road, Plimmerton.6251
ZL2BBT Grove, K. E., 3 Lomond Street, Newlands, Wellington.6004
ZL2BBU Pearmain, C. E., 47 Alton Street, Nelson.7001
ZL2BBV Gorst, T. H., 2 Belmont Street, Havelock North.4201
ZL2BBW Byles, T. W., 16 Wedgewood Grove, Palmerston North.5301
ZL2BBY Bray, H. J. J., 7 Alexandra Road, Wellington.6003
ZL2BBZ Dickson, L. P., Lower Okoki Road, 45 R.D. , Urenui.4655
ZL2BCA Scott, D. L., 10 Waimea Road, Nelson.7001
ZL2BCB Tunnicliffe, C. G., 128 Vogel Street, Palmerston North.5301
ZL2BCC Chang, A. G. M., 11 Redwood Close, Paraparaumu.6152
ZL2BCD Dean, F. R. J., 47 Tweed Road, Papakowhai.6250
ZL2BCF Pratt, D. H., 62 Ruskin Road, Newlands, Wellington.6004
ZL2BCG Jackson, J., Thorp Street, Motueka., P.O.Box 218, Motueka.7161
ZL2BCH Brayshaw, K. V., 63 Balfour Street, Wellington.6002
ZL2BCK Thorp, G. R., 110 Riverbend Road, Napier.4001
ZL2BCL Dagg, A. H., 77 Barker Road, Marewa, Napier.4001
ZL2BCO Gooch, G. M., 6b Williams Terrace, Palmerston North.5301
ZL2BCP Bromley, J. H., 9 Archer Place, Westport.7601
ZL2BCR Christie, A. J., 259 Cambridge Street, Levin.5500
ZL2BCS Hooker, B. C. A., 2/212 Lovedale Road, Hastings.4201
ZL2BCT Clements, D. J., 179 Main Street, Greytown.5953
ZL2BCU Stephenson, W. R., 21 Belmont Terrace, Lower Hutt.6301
ZL2BCV Williams, C. W., 151 Waihi Road, Hawera.4800
ZL2BCW Kerr, M. J. B., 8 Tarikaka Street, Ngaio, Wellington.6004
ZL2BCX Luxford, J. W., R.D. 9, Feilding.5600
ZL2BCY Wallen, E. J., 66 Wildish Street, Gisborne.3801
ZL2BCZ Bailey, I. K., 2/273 College Street, Palmerston North.5301
ZL2BDB Herbert, J. W., Onekura Bay, Queen Charlotte Drive, Picton.7372
ZL2BDD Harris, R. S., Mt. Adde, R.D. 4, Blenheim.7321
ZL2BDE Gisborne Boys' High School Radio Club , Roebuck Road, Gisborne.3801
ZL2BDF Garratt, H., 172 Knights Road, Lower Hutt.6401
ZL2BDG Head, B. P., 22 Greenvalley Rise, Glenfield, Auckland.1310
ZL2BDH Hulse, J. C., Pughs Road, R.D. , Richmond.7031
ZL2BDI Grenfell, N. W., 112 Fitzherbert Street, Featherston.5952
ZL2BDJ Sutherland, G. D. K., 40 Budge Street, Blenheim.7301
ZL2BDK Rodda, D. G., "Petersham Place", 94 Tikoki Street, Masterton.5901
ZL2BDL McLachlan, R. M., 152 Te Mata Road, Havelock North.4201
ZL2BDM Mote, B. J., 55 Burness Road, Greenmeadows, Napier.4001
ZL2BDN New Plymouth Branch NZART (Inc.), see Branch Directory
ZL2BDQ Johnson, W. J., 363 Westminster Avenue, Napier.4001
ZL2BDR Greig, N. A., 145 Normandale Road, Lower Hutt.6301
ZL2BDS Corbett, A. A., 587 Featherston Street, Palmerston North.5301
ZL2BDT Robotham, R. W., 30 East Street, Palmerston North.5301
ZL2BDU Pickett, B. T., 4 Harrow Place, Palmerston North.5301
ZL2BDV Inge, S. R., 9 High Street, Island Bay, Wellington.6002
ZL2BDW Smith, G. B., 1299 Fergusson Drive, Upper Hutt.6301
ZL2BDZ Johnson, G. V., 19 Dawson Street, Pahiatua.5471
ZL2BEC Hislop, R. G., 44 Donnelley Drive, Wainuiomata.6305
ZL2BED Dunkley, G. J. H., 53c Chatsworth Road, Silverstream.6402
ZL2BEE Williams, D., 12 Kippenberger Street, Masterton.5901
ZL2BEF London, P. R., 12 Herbert Street, Masterton.5901
ZL2BEG Cropp, B. A., 7 Blue Mountains Road, Silverstream.6402
ZL2BEI Hastings Branch NZART (Inc.), see Branch Directory
ZL2BEJ Squire, D. N., White Rose Dairy, Main Road, Okato.4652
ZL2BEK Campbell, L. T., 14 Leighton Avenue, Lower Hutt.6301
ZL2BEL Hoogeveen, W., 35 Ramanui Avenue, Hawera.4800
ZL2BEM Mackrell, T. F., Maru Maru School, Wairoa.4192
ZL2BEN Fretter, M. S. E., R.D. 2, Wanganui.5021
ZL2BEO Colley, M. J., 23 Churchill Avenue, Richmond, Nelson.7002
ZL2BEP Whiteford, P. C., 54 Aurora Terrace, Wellington.6001
ZL2BEQ Penberthy, P. M., 5 R.D. , Rangitiki Line, Newbury, Palmerston North.5321
ZL2BER Crompton, R. P. K., 54 Reinga Road, R.D. 2, Kerikeri.0452
ZL2BEU Neumer, E. M., 7 Copeland Street, Lower Hutt.6301
ZL2BEV Vondruska, A. J. J. M., P.O.Box 27-332, Wellington.6037
ZL2BEX Ramsay, D. A., Fox Hill, R.D. 1, Wakefield.7181
ZL2BEZ Clark, A. R., 116a Cranford Street, St Albans, Christchurch.8001
ZL2BFA Parkinson, R. M. (Mrs), 38 Sovereign Street, Nelson.7001
ZL2BFB Wilde, R. H., 179 Cook Street, Palmerston North.5301
ZL2BFD Walshe, R. J., 42 Wainuiomata Road, Wainuiomata.6305

ZL2BFE	Edgar, F., North Street, Motueka.7161
ZL2BFF	Cummerfield, G. C., 3 Croxley Place, Palmerston North.5301
ZL2BFG	Webley, H. R., 32e Mission Street, Lower Hutt.6301
ZL2BFH	Holt, D., 5 Hillary Heights, Gisborne.3801
ZL2BFI	Young, D. E., 97 Rosetta Road, Raumati South.6150
ZL2BFJ	Ireland, P. J., 45 George Street, Levin.5500
ZL2BFK	Potroz, K. N., 206 Mayfair Avenue, Hastings.4201
ZL2BFM	Thomas, K. F., 17d Manu Crescent, New Plymouth.4601
ZL2BFN	Crabtree, J. A., 2 Guadeloupe Crescent, Grenada, Wellington.6004
ZL2BFO	Largerstedt, B. A., 26 Russell Road, Wainuiomata.6305
ZL2BFP	Kinge, G. H., 62 Oak Street, Gisborne.3801
ZL2BFQ	Geange, S. W., 2a Victoria Street, Levin.5500
ZL2BFR	Wiggins, H. N., 23 Slacks Road, Palmerston North.5301
ZL2BFS	Rushton, G. A. W., 149 Te Moana Road, Waikanae.6154
ZL2BFT	Cavanagh, B. J., 67 Alexander Avenue, Napier.4001
ZL2BFU	Lacey, G., 27 Bledisloe Street, Masterton.5901
ZL2BFV	McIver, W. C., 22a Ballance Street, New Plymouth.4601
ZL2BFW	Peters, R. E. F., 50 Arapiki Road, Stoke, Nelson.7001
ZL2BFX	Kerr, A. J., 50a Chelmsford Street, Ngaio, Wellington.6004
ZL2BFY	Lambert, R., 12 Betts Avenue, Masterton.5901
ZL2BFZ	Thum, F. A., 107 Houghton Bay Road, Wellington.6003
ZL2BGA	Grainger, K. B., 366c Devonport Road, Tauranga.3001
ZL2BGB	Barnett, C. J., 42a Darlington Road, Wellington.6003
ZL2BGC	Passuello, M. G. D., 50 Apuka Street, Brooklyn, Wellington.6002
ZL2BGD	York, R. W. F., 41a Nelson Street, Blenheim.7301
ZL2BGE	Boyle, L., 37 Lewis Avenue, Wanganui.5001
ZL2BGF	Toms, R. V., 45 Moncur Drive, Rotorua.3201
ZL2BGH	Bridge, G. H., 38 Ngatoto Street, Ngaio, Wellington.6004
ZL2BGI	Pycroft, W. J., 12 Ellesmere Avenue, Miramar, Wellington.6003
ZL2BGJ	Jonas, G. M., Otaraoa Road, R.D. 43, New Plymouth.4656
ZL2BGK	England, V. I. (Mrs), 29 Horokiwi Road, Newlands, Wellington.6004
ZL2BGL	Conway, I. W., Caseys Road, Blind River, Seddon.7353
ZL2BGN	Eccles, K. R., Tarrant Road, R.D. 1, Upper Moutere.7152
ZL2BGO	Grove, P. E., 38 Tilbury Street, Lower Hutt.6301
ZL2BGP	Griffith, K. C., 801e Queen Street East, Hastings.4201
ZL2BGQ	Buckton, G. S., 44 McLauchlan Street, Blenheim.7301
ZL2BGT	Bennett, P., 19 Wainui Street, Nelson.7001
ZL2BGU	Clemens, W. E., 5 Lowry Street, Richmond, Nelson.7002
ZL2BGW	Kisby, M., 3 Richmond Hill, Tawa, Wellington.6203
ZL2BGX	Smith, W. H., 65 Sefton Street, Wadestown, Wellington.6001
ZL2BGY	Bennett, A. J., 2 Cheltenham Terrace, Newlands, Wellington.6004
ZL2BGZ	McLean, G. M., 107 Richmond Street, Petone.6303
ZL2BHB	Kitching, L. A., 9 Isel Place, Stoke, Nelson.7001
ZL2BHC	Wilcox, C., 35 Jeep Road, Raumati South.6150
ZL2BHD	Bateman, G. W., 54 Murray Avenue, Hawera.4800
ZL2BHE	Walker, D. C., c/- R. Walker, 9 Milne Terrace, Island Bay, Wellington.6002
ZL2BHF	Meachen, J. A., 31 Perry Street, Silverstream, Upper Hutt.6402
ZL2BHG	Lawson, J. R., 114 Hospital Road, Blenheim.7301
ZL2BHH	Burnham, E. D., 15 Tawa Street, Levin.5500
ZL2BHI	Orams, K. J., 13 Eagle Street, Karori, Wellington.6005
ZL2BHJ	Andrews, G. J. (Mrs), 66 Khandallah Road, Khandallah, Wellington.6004
ZL2BHK	Johnson, D. H., 11 Linwood Drive, Paraparaumu.6152
ZL2BHL	Fowler, R. L., Main Road, R.D. 3, Riwaka.7160
ZL2BHM	Matthews, E. F., Moeawatea, R.D. , Waverley.5182
ZL2BHN	Allardyce, J. P. G., Marcellin Hall, 30 Korma Road, Royal Oak, Auckland.1106
ZL2BHO	Henderson, R. L., Main Road, Waiohiki.4150
ZL2BHP	Walker, J., 4 St. Ronans Avenue, Lower Hutt.6301
ZL2BHQ	Miller, A., 27 Fairfield Avenue, Lower Hutt.6301
ZL2BHR	Inwood, R. G., 22 Benmore Avenue, Palmerston North.5301
ZL2BHS	Bowden, C. J., 64 Kiwi Crescent, Tawa, Wellington.6203
ZL2BHT	McLaren, D. M., 26 Van Dieman Street, Nelson.7001
ZL2BHV	Kilgour, A. D., 12 Miriona Grove, Paekakariki.6151
ZL2BHW	Quayle, R. P., 7 Te Pari Pari Road, Pukerua Bay.6252
ZL2BHX	Vernon, T. J. E., 1 Whio Street, Taihape.5163
ZL2BHZ	Searle, P. M., 58 Russell Street, Gisborne.3801
ZL2BIB	Meikle, D. A., 4 Angle Street, Picton.7372
ZL2BID	Gordon, A. F. W., 64 King Street, Taradale, Napier.4001
ZL2BIE	Phillips, E. L., 1/5 Jebson Street, Christchurch.8001
ZL2BIF	McKain, S. J., 1354 Devon Road, R.D. 42, Waitara.4656
ZL2BIG	Bingham, W. J., 31 Elizbeth Street, Feilding.5600
ZL2BII	Wincer, R. A., 82 Cleveland Terrace, Nelson.7001
ZL2BIJ	Pugh, A. G. E., 6 Smith Street, Paekakariki.6151
ZL2BIL	Morris, R. K., 5 Lilac Lane, Maungaraki, Lower Hutt.6301
ZL2BIM	Green, A. K., 197 Luckens Road, Westharbour, Auckland.1208
ZL2BIN	Fletcher, G. L., 7 Collingwood Street, Nelson.7001
ZL2BIO	Barnes, D. J., 16 Jackson Street, Nelson.7001
ZL2BIQ	Thorner, G. S., 1 Emerson Street, Shirley, Christchurch.8006
ZL2BIR	Kidd, P. R., 70 McLeod Street, Upper Hutt.6401
ZL2BIS	Porter, I. G., 20 Belfield Street, Christchurch.8006
ZL2BIT	Willan, L. R., 8 Warren Place, New Plymouth.4601
ZL2BIU	McCaw, J. I., 8 Thornley Street, Titahi Bay.6202
ZL2BIV	Kendall, G. N., 20 Hawthorne Street, Christchurch.8005
ZL2BIW	Rusbatch, G., 116 Lyndhurst Road, Hastings.4201
ZL2BIY	Galyer, R. A., 906 Albert Street, Hastings.4201
ZL2BIZ	Stephenson, W. V., 460 Te Moana Road, Waikanae.6154
ZL2BJA	Salmen, A. H., 8 Mudie Street, Lower Hutt.6301
ZL2BJB	Horne, D. A., c/- Pinenui, Belmont Road, R.D. 1, Plimmerton.6251
ZL2BJC	Hill, I. McK. G., 29 Holdsworth Avenue, Trentham.6402
ZL2BJD	Robson, E. H., 64 Alexander Avenue, Napier.4001
ZL2BJE	Day, S. M., see ZL7BJE.
ZL2BJF	Beaumont, A. P., 39 Peck Street, Lower Hutt.6301
ZL2BJG	McGregor, B. A., 10 Saville Row, Johnsonville, Wellington.6004
ZL2BJI	Robinson, D. W., 88 Manawapou Road, Hawera.4800
ZL2BJM	Dewick, J. A., 98 Riverbend Road, Napier.4001
ZL2BJP	De Grey, P. J., 156 Brooklands Road, New Plymouth.4601
ZL2BJQ	Guest, R., 15 Webber Street, Paraparaumu Beach.6153
ZL2BJR	Wilkinson, K. S., c/- W. St. J. Reed, 11 Wood Street, Upper Hutt.6401
ZL2BJS	Jamieson, D. R., 2 Waipuna Street, Blenheim.7301
ZL2BJU	Thompson, J. J., 15 Golf Road, Paraparaumu Beach.6153
ZL2BJV	Menzies, K. J., Main Road, Grovetown, Blenheim.7301
ZL2BJX	Thompson, J. S., 124 Manuka Street, Stokes Valley.6306
ZL2BJY	Benson, A. P., 29 Robinson Road, Foxton.5551
ZL2BJZ	Murdock, H. D. A., 15 Arawa Street, Raumati Beach.6150
ZL2BKA	Dale, J. S. A., 16 Kiwi Road, Devonport, Auckland.1309
ZL2BKB	Hanson, H. G., c/- R. A. Garlick, 23 Lydia Street, Greymouth.7801
ZL2BKC	Knowles, W. D., 39a Clifford Road, Johnsonville, Wellington.6004
ZL2BKD	Barriball, E. C., 66 Bell Street, Linden.6203
ZL2BKE	Glassey, E. C., 422 Jackson Street, Petone.6303
ZL2BKF	Tompkins, B. H., R.D. 4, New Plymouth.4621
ZL2BKG	Thorpe, R., 108 Winara Avenue, Waikanae.6154
ZL2BKH	Wharton, C. D., Pakaraka Road, R.D. 6, Masterton.5901
ZL2BKI	Hurst, J. J., 154 Kahu Road, Paremata.6250
ZL2BKJ	Dalcom, B. P. W., 21 Gebbie Road, Taradale, Napier.4001
ZL2BKK	Powell, D. B., 1 Oliver Road, Bucklands Beach.1704
ZL2BKL	Allen, B. W., 38 Wesley Avenue, New Plymouth.4601
ZL2BKM	Meek, A. P., 17 Colchester Crescent, Newlands, Wellington.6004
ZL2BKN	Burling, B. N. G., 102a Harold Holt Avenue, Napier.4001
ZL2BKO	Christensen, K. D., 4/159 Ferguson Street, Palmerston North.5301
ZL2BKP	MacDonald, J. V., 4/34 Allen Road, Raumati Beach.6150
ZL2BKR	Truman, H. J., 21 Rintoul Grove, Stokes Valley.6306
ZL2BKS	Brown, K. J., 2/8 Motueka Street, Ngaio, Wellington.6004
ZL2BKU	Burton, F. S., 48 Wikitoria Road, Wanganui.5001
ZL2BKV	Pompe, H. G. A., 10 Beach Road, Haumoana.4250
ZL2BKW	Harrowfield, T. R., Roberts Line, R.D. 8, Palmerston North.5321
ZL2BKY	Cox, K. L., 37 Cuba Street, Petone.6303
ZL2BKZ	Rodrigues, J. F. C., 115 Brooklands Road, New Plymouth.4601
ZL2BLA	Hyde, G. D., 130 The Parade, Paekakariki.6151
ZL2BLB	Ames, M. L., Queen Street East, R.D. 1, Levin.5500
ZL2BLC	Ottaway, J. T. J., 32 Owen Street, Belmont, Lower Hutt.6301
ZL2BLD	Turner, B. W., Cadman Road, Dannevirke.5491
ZL2BLE	Dew, A. W., Willow Grove, Homebush, Masterton.5921
ZL2BLF	Kooy, W., 39 Waiho Terrace, Porirua.6201
ZL2BLG	Patterson, R. A., 338 High Street, Dannevirke.5491
ZL2BLH	Ellison, D. M., Highway 2, Opapa, Hawkes Bay.4172
ZL2BLI	Inkster, D. J., P.O.Box 27, Ohakune.5171
ZL2BLJ	Hodgkinson, J., 171 Tukapa Street, New Plymouth.4601
ZL2BLK	Baynham, P. S., Pyle Road West, One Tree Point, R.D. 1, Ruakaka.0253
ZL2BLL	Shaw, V.S., 13a Weathers Place, Taradale, Napier.4001
ZL2BLM	Rait, N. A. H., 2 Revans Street, Featherston.5952
ZL2BLN	Scarrott, P. E., Buchanan Road, Bay View, Hawkes Bay.4001
ZL2BLO	Moore, P. C., 8 Maxwell Street, Napier.4001
ZL2BLP	Rodgers, G. K., 72 Fleete Street, Christchurch.8006
ZL2BLQ	Mangin, S. G., 33 West Street, Greytown.5953
ZL2BLS	Lavery, M. W., 16 Morrissey Street, Hawera.4800
ZL2BLT	Bourke, R. F., 179 Fairfield Road, Hawera.4800

ZL2BLU	Smith, W. B., 12 Clifford Street, Hawera.4800
ZL2BLV	Christian, J. M., 12 Golders Place, Taupo.3300
ZL2BLW	Batt, L. A., 33 Waterhouse Road, Masterton.5901
ZL2BLX	McLauchlan, A. C. L., 122 Redwood Avenue, Tawa.6203
ZL2BLY	Ashwell, D. H., 3/14 Armour Place, Napier.4001
ZL2BMA	Calvert, R. H. G., Fabians Road, R.D. 1, Greytown.5953
ZL2BMB	Walker, M. K. R., 10 Butler Street, Naenae.6301
ZL2BMC	Childs, J. R., 5 Savage Crescent, Waipukurau.4176
ZL2BMD	Pearson, R. K., Fountains Road, Christchurch.8003
ZL2BME	Clarke, G. R., 57 Kauri Street, Miramar, Wellington.6003
ZL2BMG	Dunlop, J. A., 23 Tarata Street, Wanganui.5001
ZL2BMH	Irving, J. E., c/- Irvings Dairy, Bridge Street, Bulls.5452
ZL2BMI	Sears, E. J.(Rev), 31 Ferry Road, Spring Creek, Marlborough.7350
ZL2BMJ	Railton-Jacks, P. N., 31 Seaforth Avenue, Palmerston North.5301
ZL2BMK	Bowman, R. F., 146 Conclusion Street, Ascot Park, Porirua.6201
ZL2BML	McCormick, C. D. K., 13 Main Road, Westshore, Napier.4001
ZL2BMN	Irving(Snr), J. E., 30 Achilles Street, Stratford.4700
ZL2BMO	Garrod, J., P.O. Box 3225, Richmond.7031
ZL2BMP	Barnes, T. H., 47 Larsen Crescent, Tawa, Wellington.6203
ZL2BMQ	Mouat, W. A., c/- Pukeora Home, P.B., Waipukurau.4176
ZL2BMR	Vining, L. G., 49 Havelock Avenue, Palmerston North.5301
ZL2BMS	Moore, M. B., 187 Riverside Drive, Lower Hutt.6301
ZL2BMV	Hathaway, R. L. S., 18 Adams Lane, Blenheim.7301
ZL2BMW	Foster, P. K., 15a Transom Close, Whitby.6253
ZL2BMX	McIver, D., 65 Doralto Road, New Plymouth.4601
ZL2BMY	Meek, E., 1 Harrow Street, Taradale, Napier.4001
ZL2BMZ	Murray, P. L., "Highland Orchard", Paparata Road, R.D. , Bombay.1750
ZL2BNA	Hitchman, G. J., Feilding Road, Feilding.5600
ZL2BNB	Walker, R. A., 24 Catlins Crescent, Palmerston North.5301
ZL2BNC	Cook, R. A., 50 Spencer Street, Crofton Downs, Wellington.6004
ZL2BND	Smith, T. W., 4 St Johns Terrace, Tawa, Wellington.6203
ZL2BNE	Marr, N. C., 7 Rothwell Place, Blenheim.7301
ZL2BNF	Grant, L. G., 34 Ferguson Street, Bay View, Napier.4001
ZL2BNG	Gibellini, J. A., 71 Point Road, Monaco, Nelson.7001
ZL2BNH	Bastin, F. T., 103 Gascoigne Street, Hastings.4201
ZL2BNI	Gardner, N. N., 158 Nile Street East, Nelson.7001
ZL2BNJ	French, M. J., 10 Gurney Road, Belmont, Lower Hutt.6301
ZL2BNL	Cook, M. J., 18 Rubens Place, Burnside, Christchurch.8005
ZL2BNM	McKay, P. G., Rowley Crescent, Grovetown, Blenheim.7301
ZL2BNN	Robinson, H. T., 6 Becroft Drive, Forrest Hill, Auckland.1310
ZL2BNO	Taylor, R. D., 21 McLaren Street, Mangaroa, Upper Hutt.6401
ZL2BNP	Johnson, P. G., P.O.Box 174, Pahiatua.5471
ZL2BNQ	Claydon, K. W., 183 Tukapa Street, New Plymouth.4601
ZL2BNR	Bos, F., 34 Albert Street, Pahiatua.5471
ZL2BNS	Townshend, A. P., 35a Marybank Road, Nelson.7001
ZL2BNT	Hudson, G. J., 5 Konini Street, Masterton.5901
ZL2BNU	Ryba, K. A., c/- Education Department, Massey University.5330
ZL2BNV	Lowe, P. A., 12 Wye Street, Island Bay, Wellington.6002
ZL2BNW	Walbridge, S. W., 94 Barnard Street, Wadestown, Wellington.6001
ZL2BNX	Isherwood, K., c/- Napier Hospital, Private Bag, Napier.4020
ZL2BNY	Gill, W., Aroha, Horokiwi Road, Petone, Wellington.6303
ZL2BNZ	Trubshaw, J. R., 6 Belk Place, Feilding.5600
ZL2BOA	Thorp, M. D., 110 Riverbend Road, Napier.4001
ZL2BOB	Priest, B. W., 21 Winchester Street, Palmerston North.5301
ZL2BOD	Gilchrist, L. J. (Mrs), P.O.Box 651, 20 Vogel Street, Hawera.4800
ZL2BOE	Large, R. A., 44 Donnelley Drive, Wainuiomata.6305
ZL2BOG	Joyce, G. T., Valley Road, Gisborne.3801
ZL2BOI	Moretti, G. S., 12 Milverton Avenue, Palmerston North.5301
ZL2BOJ	Harris, R. E., 57 Princess Street, Waitara.4656
ZL2BOL	Biggins, B. F., 70 Lohia Street, Khandallah, Wellington.6004
ZL2BOM	Phillips, O. K., 118 Long Melford Road, Palmerston North.5301
ZL2BOO	Hope, M. R., P.O. Box 812, Blenheim.7300
ZL2BOP	Bradley, R. L.(Rev), R.D. 1, Wai-iti, Wakefield, Nelson.7021
ZL2BOQ	Groat, J. E., 586 Ferguson Street, Palmerston North.5301
ZL2BOS	Grant, H. H., 15 Grove Street, Nelson.7001
ZL2BOT	Kennedy, S. R., 25 Beresford Street, Pukekohe.1800
ZL2BOU	Carter, A. F., 13 Todd Place, Richmond, Nelson.7002
ZL2BOV	Griffiths, B. A.(Mrs), Main North Road, Urenui.4655
ZL2BOW	Howan, A. R., 7 Almora View, Ascot Park, Porirua.6201
ZL2BOY	Clarke, R. G., 3 Whitby Place, New Plymouth.4601
ZL2BOZ	Flowers, F. J., 70 Hellyers Street, Birkdale, Auckland.1310
ZL2BPB	Sandilands, L. C., 16 Riversdale Road, Upper Hutt.6401
ZL2BPC	Hayward, E. V., 23 Mt Vernon Place, Nelson.7001
ZL2BPD	Donovan, P. E., 389 Muritai Road, Eastbourne.6304
ZL2BPE	Vennix, J. H., 89 Mitchell Street, Brooklyn, Wellington., P.O.Box 9029, Wellington.6031
ZL2BPF	Cotter, M. C., 24 Rodney Street, Woburn, Lower Hutt.6301
ZL2BPG	Harding, B. P., 55 Hillside Drive, Maoribank, Upper Hutt.6401
ZL2BPH	Simmonds, J. H., Kahutara Road, R.D. 1, Featherston.5952
ZL2BPI	Watt, I. D., 9 Edelweiss Grove, Timberlea, Upper Hutt.6402
ZL2BPJ	Maddock, R. H., 7 Haylock Grove, Totara Park, Upper Hutt.6401
ZL2BPK	Johns, B. K., c/- Radio Regulatory, P.O. Box 9343, Wellington.6031
ZL2BPL	Kerslake, M. G. R., 1 Marama Terrace, Eastbourne.6304
ZL2BPN	Thompson, I., 8 Dampier Avenue, Palmerston North.5301
ZL2BPO	Mainwaring, P., 2 Dysart Road, Otumoetai, Tauranga.3001
ZL2BPP	South Wairarapa Amateur Radio Club, see Branch Directory
ZL2BPQ	Scherf, M. W., 30 Arun Crescent, Melrose, Wellington.6003
ZL2BPR	Hoyt, B. E., 33 Workshop Road, Masterton.5901
ZL2BPS	Stewart, P. J., Akatarawa Road, R.D. 2, Upper Hutt.6421
ZL2BPT	Craw, G. J., Coupers Road, R.D. 3, Palmerston North.5321
ZL2BPU	Goodall, R. N., 31 Plymouth Road, Flaxmere, Hastings.4201
ZL2BPV	Johnston, A. A., 26 Grey Street, Woodville.5473
ZL2BPW	Herbert, J. O., Mataro Road, R.D. 45, Urenui.4655
ZL2BPX	Thompson, S. A., 8 Dampier Avenue, Palmerston North.5301
ZL2BPY	Crook, D. J., 11 Forward Street, Greenmeadows, Napier.4001
ZL2BPZ	McIvor, W. G., 4 Halifax Street, Wainuiomata.6305
ZL2BQA	Nield, G. S., 4a Belgium Terrace, Gisborne.3801
ZL2BQM	Brooking, S. C., 8 Robert Shortt Street, Wairoa, Hawkes Bay.4192
ZL2BQN	Hedley, W. A., 39 Mitchell Road, Wairoa.4192
ZL2BQU	Douglass, W. S., 5 Poharama Place, New Plymouth.4601
ZL2BQV	Waterson, I. B., 4a Antonio Street, Stratford.4700
ZL2BQW	McNeil, W. G., 86 Domett Street, Opunake.4653
ZL2BQX	Hoogeveen, S.(Bill), 58 Burns Street, P.O.Box 156, Hawera.4800
ZL2BQY	Symon, D. R., 8 Richmond Street, New Plymouth.4601
ZL2BRA	Cash, I. M., 40 Hutchins Street, Waitara.4656
ZL2BRB	Ballantyne, J. N., 10 Holford Street, New Plymouth.4601
ZL2BRC	Ballantyne, J., 10 Holford Street, New Plymouth.4601
ZL2BRP	Wheatley, M. J., 100 Wills Crescent, Ashhurst.5451
ZL2BRQ	Grahame, K. S., c/- 21 Mill Street, Marton.5151
ZL2BRR	Scott, A. S., 66 Alexandra Street, Marton.5151
ZL2BRS	Russell, S. G., 85 Rugby Street, Palmerston North.5301
ZL2BRT	Rogers, N. D., 20 Hudson Avenue, Bulls.5452
ZL2BRU	Allison, R., Te Uri Road, R.D. 3, Dannevirke.5491
ZL2BRV	Cook, V. R., 95 Niblett Street, Wanganui.5001
ZL2BSI	Newcombe, S. D., 4a Banksia Grove, Maungaraki, Lower Hutt.6301
ZL2BSJ	Knol, W., 13b Waikato Street, Island Bay, Wellington.6002
ZL2BSK	Hyndman, R. H., 20 Central Terrace, Alicetown, Lower Hutt.6301
ZL2BSL	Matheson, J. D., 43 Tirohanga Road, Lower Hutt.6301
ZL2BSM	Ryan, M. D., 6 Woodvale Grove, Epuni, Lower Hutt.6301
ZL2BSN	Alabaster, E. J., 79 Victory Crescent, Tawa, Wellington.6203
ZL2BSO	Mitchell, A. B., 37 Satara Crescent, Khandallah, Wellington.6004
ZL2BSP	Lloyd, L. V., 4 Nola Avenue, Raumati Beach.6150
ZL2BSQ	Lawrence, R. W. C., 25 Linwood Drive, Paraparaumu.6152
ZL2BSS	Graham, W., 8 West Road, Northland, Wellington.6005
ZL2BST	Tichbon, B. W., 19 Hornsey Road, Melrose, Wellington.6003
ZL2BSU	Dove, K. N., c/- 112b Amanda Avenue, Hamilton.2001
ZL2BSV	Mitchell, M. G., 37 Satara Crescent, Khandallah, Wellington.6004
ZL2BSW	Gedye, E. D. M., 15 Seine Street, Island Bay, Wellington.6002
ZL2BSX	Whibley, D. G., 96 Clifford Road, Johnsonville, Wellington.6004
ZL2BSY	Oliver, A. D., 2 Rosewood Place, Paraparaumu Beach.6153
ZL2BSZ	Beechey, R. D., 12 Kowhai Grove, Waikanae.6154
ZL2BTB	Large, M., 44 Donnelley Drive, Wainuiomata.6305
ZL2BTC	Rawlings, R. F., 23 Seaview Crescent, Picton.7372
ZL2BTD	King-Turner, P. R., 67 Broadway, Picton.7372
ZL2BTF	Budge, D.(Dr), 63 High Street, Motueka.7161
ZL2BTG	Woodham, R. B., 18 Goulter Street, Seddon.7353
ZL2BTH	Emslie, H. H., 39 New Renwick Road, Blenheim.7371
ZL2BTI	House, T. S. R., c/- Riverlea Gardens, Appleby, Richmond.7031

ZL2BTJ	York, K. E., 28 Cubitt Street, Blenheim.7301
ZL2BTK	Willings, H. K., 27 Oxford Street, Picton.7372
ZL2BTO	Duncan, C. W., 15 Seaton Street, Marybank, Nelson.7001
ZL2BTP	Snow, R. J., 5 Rimu Street, Nelson.7001
ZL2BTR	Simpson, Z. H., 1/86 Grove Street, Nelson.7001
ZL2BTU	Daken, T. R., 15 Scotland Street, Picton.7372
ZL2BTV	Ching, G. R., 51 McLaughlan Street, Blenheim.7301
ZL2HAM	Schollum, W. D., 41 Mill Road, Gisborne.3801
ZL2NAE	Hooper, D. R., 7 Cornwall Street, Eltham.4751
ZL2NBJ	Brown, J. R., 42 Owen Street, Newton, Wellington.6002
ZL2NBK	Holdom, K. A., 31 St Johns Terrace, Tawa, Wellington.6203
ZL2NBP	Rennie, P. W. G., 64 Park Terrace, Blenheim.7301
ZL2TAA	Stanners, J. L., 81 Old Karori Road, Karori, Wellington.6005
ZL2TAB	Hinton-Cooper, K. E., 49 Titania Street, Stratford.4700
ZL2TAC	Van Boheemen, D. J., 78 Dimock Street, Titahi Bay, Wellington.6202
ZL2TAD	Mallinson, E. J., 64 Seymour Street, Blenheim.7301
ZL2TAE	Cooney, G. P., Deme Technical Staff, Trentham Camp, Trentham.6402
ZL2TAG	Bennett, A. J., 12 Tudor Court, Paraparaumu Beach.6153
ZL2TAH	Pope, H. N., 171 Howick Road, Blenheim.7301
ZL2TAI	Kingsbeer, B. H., 10 Luton Street, Palmerston North.5301
ZL2TAJ	Squires, D. R., 6 Waipounamu Drive, Lower Hutt.6301
ZL2TAK	Ingham, C. G., 138 Dowse Drive, Maungaraki, Lower Hutt.6301
ZL2TAL	Gyde, R. V., 148a Pioneer Road, New Plymouth.4601
ZL2TAM	Cooper, I. L., 116 Rutene Road, Gisborne.3801
ZL2TAN	Fairbairn, R., 49 Salisbury Road, Richmond, Nelson.7002
ZL2TAO	O'Donnell, A. A., 39 Lismore Street, New Plymouth.4601
ZL2TAP	Baker, W. R. E., 118 Taylor Terrace, Tawa.6203
ZL2TAQ	Hadfield, C. I., 69 Major Drive, Kelson, Lower Hutt.6301
ZL2TAR	Ingham, J. D., 138 Dowse Drive, Maungaraki, Lower Hutt.6301
ZL2TAS	Marsh, J. K., P.O.Box 26, Oakura.4650
ZL2TAU	Wilson, S. J., 50 Sheridan Terrace, Johnsonville, Wellington.6004
ZL2TAV	Murray, R. D., 101 Frederick Street, Hastings.4201
ZL2TAX	Barnes, E. J., 54 Brooker Grove, Newlands, Wellington.6004
ZL2TAY	Crook, R. J., 72 Fraser Avenue, Johnsonville, Wellington.6004
ZL2TBA	Higgott, L. G., Main Road, Wharekaho Beach, Whitianga.2856
ZL2TBB	Drew, A. L. B., 16 Tuatoru Street, Eastbourne.6304
ZL2TBD	Owen, N. A., 45d Oxford Street, Tawa.6203
ZL2TBE	Hood, S. W., 122 Duncan Street, Wanganui.5001
ZL2TBF	Carnley, L. J., 39 Hilltop Avenue, Whangarei.0101
ZL2TBG	Snelson, K. H., 12 Staithes Drive North, Whitby, Porirua.6201
ZL2TBH	Henderson, G. J., 30 Wisteria Grove, Lower Hutt.6301
ZL2TBK	Love, G. A., 2 Karaka Crescent, Levin.5500
ZL2TBL	Lott, A. G., 11 Poynter Street, Blenheim.7301
ZL2TBM	O'Donnell, J. N., 39 Lismore Street, New Plymouth.4601
ZL2TBN	Shennan, B. V., 31 Rossiter Avenue, Lower Hutt.6301
ZL2TBP	Norgrove, A. E., 90 South Karori Road, Karori, Wellington.6005
ZL2TBQ	Wills, R. E., 66 Park Road, Lower Hutt.6301
ZL2TBR	Highman, R. E., Moutapu Bay, Mahau Sound, Marlborough, R.D. 2, Picton.7372
ZL2TBS	Ward, L. A., 11 Pinny Avenue, Lower Hutt.6301
ZL2TBU	Stevens, J. E. R., 48 Chesterton Street, Johnsonville, Wellington.6004
ZL2TBX	Carson, M. R., Tayforth Road, R.D. 4, Wanganui.5021
ZL2TBY	Annand, R. C., 67 Joll Road, Havelock North.4201
ZL2TBZ	Milsom, M. A., 8 Lyndfield Lane, Newlands, Wellington.6004
ZL2TCA	Poulsen, J. M., 2/14 Monckton Street, Feilding.5600
ZL2TCB	Dobbs, A. J., 14 Oaklands Grove, Upper Hutt.6401
ZL2TCC	Brown, G. R., 28 John Street, Stokes Valley.6306
ZL2TCD	Phillips, A. R. J., 5 Mount Street, Kelburn, Wellington.6005
ZL2TCE	Taylor, I. L., 1 High Road, Hawera.4800
ZL2TCF	Clifford, I. R., 9 Falcon Street, Porirua.6201
ZL2TCG	Stipkovits, S. P., 76 View Road, Houghton Bay, Wellington.6003
ZL2TCH	Coombridge, J. P., Marchant Road, Kaitoke.6401
ZL2TCJ	Preston, R. T., 16b Witako Street, Lower Hutt.6301
ZL2TCK	Taylor, T. J. A., 37 Riversdale Drive, New Plymouth.4601
ZL2TCL	Lacey, J. D., 39 Poto Road, Lower Hutt.6301
ZL2TCM	Downs, F. W. P., 58a Chatsworth Road, Silverstream.6402
ZL2TCN	Barnhill, J. D., 26 Garfield Street, Brooklyn, Wellington.6002
ZL2TCO	Denton, S. B., 18 Roto Street, Nelson.7001
ZL2TCP	Foley, M. J., St Bedes College, Main North Road, Christchurch.8005
ZL2TCR	Wardell, M. G., 7 Lorne Street, Dargaville.0300
ZL2TCS	Smith, S. D., 9 Rosendale Crescent, Palmerston North.5301
ZL2TCT	McFarlane, P. H., 4 Lambley Road, Titahi Bay, Wellington.6202
ZL2TCU	Milne, R. J., Chemistry Division, DSIR, Private Bag, Petone.6331
ZL2TCV	Bennett, M. A., 95 Karaka Street, Wanganui.5001
ZL2TCX	Ireland, K. J., 45 George Street, Levin.5500
ZL2TCZ	Stratford High School Radio Club, (Trustee: P. Greenwood), P.O. Box 204, Stratford.4700
ZL2TDA	Dawson, D. J., 4 Cohen Place, Milson, Palmerston North.5301
ZL2TDB	Trim, G. J., 171 Stout Street, Gisborne.3801
ZL2TDC	De Grey, S. J., 156 Brooklands Road, New Plymouth.4601
ZL2TDD	Clarke, T. R., 192 Helston Road, Paparangi, Wellington.6004
ZL2TDF	Dicker, J. L., Waimea West, R.D. , Brightwater, Nelson.7151
ZL2TDH	Cathro, D. G., 36 Wingfield Place, Johnsonville, Wellington.6004
ZL2TDI	Doney, P. A., 32 D'Arcy Road, Wanganui.5001
ZL2TDJ	Cairns, K. D., 82 Maupuia Road, Miramar, Wellington.6003
ZL2TDL	McNeice, A. P., 23 Clawton Street, New Plymouth.4601
ZL2TDN	Therkleson, G. L., 25 Marine Drive, Sorrento Bay, Eastbourne, Wellington.6304
ZL2TDO	Hyde, P. R., 26 Randwick Crescent, Moera, Lower Hutt.6301
ZL2TDP	Charles, C. F., 87 Pasedena Crescent, Totara Park, Upper Hutt.6401
ZL2TDQ	Best, A. G., CIT Hall Of Residence, Private Bag, Heretaunga.6430
ZL2TDR	Gilgrist, H. T., 183 Te Moana Road, Waikanae.6154
ZL2TDS	Boyd, C. B., 39 Cuba Street, Palmerston North.5301
ZL2TDT	Chandler, L. W., 14 Dittmer Street, Otaki.6171
ZL2TDU	Walker, G. J., 4/35 Green Street, Tahunanui, Nelson.7001
ZL2TDV	Grover, D., 3 Kanpur Road, Broadmeadows, Wellington.6004
ZL2TDW	Devenport, B., Private Bag, Gisborne.3820
ZL2TDX	Simmons, P. R., 14 Caldwell Road, Woodbourne, Blenheim.7354
ZL2TDY	Richards, J. H., 633 High Street, Lower Hutt.6301
ZL2TDZ	Morrison, C. M. K., 63a Church Street, Devonport, Auckland.1309
ZL2TFA	Brough, P. W., 34 Hendersons Line, Marton.5151
ZL2TFB	Cox, R. J. C., 20 Storey Avenue, Hamilton.2001
ZL2TFC	Carruthers, B. M., 940 Mangorei Road, New Plymouth.4601
ZL2TFD	Scott, W. M., 7 Kettle Avenue, Palmerston North.5301
ZL2TFG	Crawley, W. G., 75 Somerset Road, Wanganui.5001
ZL2TFI	Pickett, B. M., 7 Ruakaka Street, Hornby, Christchurch.8004
ZL2TFJ	Pascoe, J. H., 31 Taupo Crescent, Plimmerton, Wellington.6251
ZL2TFM	Dewar, D. B., 7 Richardson Avenue, Gisborne.3801
ZL2TFN	Rhodes, V., 46 Blagdon Road, New Plymouth.4601
ZL2TFO	Brown, E. J., 6 Villa Place, Bell Block, New Plymouth.4602
ZL2TFP	Blackley, L. C., 26 Kaitawa Crescent, Paraparaumu.6152
ZL2TFS	Sears, M. E., 31 Ferry Road, Spring Creek, Marlborough.7350
ZL2TFT	Stohr, F. A., 36a Pretoria Street, Lower Hutt.6301
ZL2TFV	Etheridge, P. R., 6/184 Powderham Street, New Plymouth.4601
ZL2TFY	Candy, D. O., 8 Railway Terrace, Whangarei.0101
ZL2TFZ	Sayer, J. B., P.O.Box 21 025, Wellington.6030
ZL2TGA	Tong, A. C., 12 Princess Street, Hawera.4800
ZL2TGC	O'Leary, C. M., Black Stag Farm, Main Road, Tutira.4150
ZL2TGD	Scott, S. P., 85a Duncan Terrace, Kilbirnie, Wellington.6003
ZL2TGE	Campbell, Q. D., 7 Tikouka Place, Ohakune.5171
ZL2TGF	Moore, T. E., 24 Normanby Street, Newtown, Wellington.6002
ZL2TGG	Porritt, G. R. E., 114 Akatarawa Road, Upper Hutt.6401
ZL2TGH	Miller, G. A., P.O.Box 13078, Hamilton.2000
ZL2TGI	Steenson, A. D., 126 Napier Road, Havelock North.4201
ZL2TGJ	Johnson, T. S., 512 Huia Street, Hastings.4201
ZL2TGK	Jones, G. W., 100 Centennial Avenue, Waitara.4656
ZL2TGL	Rumsey, F. C.(Mrs), 21 Malone Road, Lower Hutt.6301
ZL2TGM	Meads, G. T., 12 Totara Terrace, Inglewood.4651
ZL2TGN	Berry, R. M., 27 Hikanui Drive, Havelock North.4201
ZL2TGQ	Greenbank, R. J., 31 Somes Crescent, Newlands, Wellington.6004
ZL2TGR	Barraud, J. M., 1 Michigan Crescent, Totara Park, Upper Hutt.6401
ZL2TGS	Leckie, G. F., House 18, Whakamaru, Mangakino.2391
ZL2TGT	Nelson, K. D., 14 Pavola Grove, Glenfield, Auckland.1310
ZL2TGU	Layton, G. R., 54a Nicholson Road, Khandallah, Wellington.6004
ZL2TGV	Illingsworth, R. J., 178 Main Road, Tawa.6203
ZL2TGW	Clifford, K. S., 46a Oxford Terrace, Lower Hutt.6301
ZL2TGX	Morrison, J. F., 27 Mulgrave Street, Ashhurst.5451

ZL2TGY	Spranger, K. J., 167 Barrett Road, New Plymouth.4601
ZL2TGZ	Allmand, H. M., P.O.Box 35, Te Horo.6170
ZL2THA	Peart, C. J., Burnside Road, Takaka.7172
ZL2THB	Cole, R. K., 117 Rewai Street, Paraparaumu.6152
ZL2THC	Dowle, G. B., 539 Carrington Road, R.D. 1, New Plymouth.4621
ZL2THD	Riggs, P. T., 470 Stokes Valley Road, Stokes Valley.6306
ZL2THG	Mackie, A. J., 8 Tarata Street, Stoke, Nelson.7001
ZL2THI	Marshall, D. W., 195 Egmont Street, Patea.5181
ZL2THJ	Gill, T. B., 69 Cambria Street, Nelson.7001
ZL2THK	Simcox, J., Racecourse Road, P.O. Box 327, Waipukurau.4176
ZL2THM	Bons, A. D., 149 Avonhead Road, Christchurch.8004
ZL2THN	Osmond, C. M., 124 Tilley Road, Paekakariki.6151
ZL2THP	Dewsnap, A. V., 30 Ruru Crescent, Heretaunga, Upper Hutt.6402
ZL2THQ	Newlands, R. G., 14 Vasanta Avenue, Ngaio, Wellington.6004
ZL2THS	Shaw, J. L., 13a Weathers Place, Taradale, Napier.4001
ZL2THT	Champtaloup, O. J., 2/10 Garden Place, Auckland.1004
ZL2THU	Cropp, I. E., 7 Blue Mountains Road, Silverstream.6402
ZL2THV	Neill, W. J., 14 Martin Grove, Normandale, Lower Hutt.6301
ZL2THW	Muir, A. W., 1 Ridvan Grove, Ngaio, Wellington.6004
ZL2THX	Blanchard, D. C., 13h York Crescent, New Plymouth.4601
ZL2THY	McCarthy, W. S., 1/201a Prospect Road, Hastings.4201
ZL2THZ	Douglas, M. E., 3 William Street, Wellington.6003
ZL2TIA	Clough, D. H., 3 Argyle Place, New Plymouth.4601
ZL2TIC	Wildbore, D. I., Waitarere Beach Road, Levin.5500
ZL2TID	Baker, N. E., Cnr Te Aute/Mt. Erin Road, R.D. 2, Hastings.4221
ZL2TIE	Guilford, A. E., 27 Rose Road, Grey Lynn, Auckland.1002
ZL2TIF	Wilson, D. J. W., 13 Kinross Street, Blenheim.7301
ZL2TII	Prosser, R. H. C., 18 George Street, Rolleston.8004
ZL2TIJ	Ordish, J. I., 19 Hendry Avenue, Hillsborough, Auckland.1004
ZL2TIK	Buchanan, I. A., Motuoapa, R.D. 2, Turangi.3371
ZL2TIL	Maxwell, D. M., 7 Plunket Avenue, Petone.6303
ZL2TIM	Lumsden, K. M., 19 Taonui Street, Papakura, Auckland.1703
ZL2TIN	Harwood, R. D., 187 Matai Road, Raumati Beach.6150
ZL2TIQ	Brieseman, P. J., 14 Tainui Terrace, Tawa.6230
ZL2TIR	Taylor, G. A., c/- Wai-Tai Farm, R.D. 1, Hastings.4221
ZL2TIS	Winton, L. J., 47 Richmond Street, Napier.4001
ZL2TIT	Taylor, A. F., 54 Emano Street, Nelson.7001
ZL2TIU	Brownlie, S. M., Ligar Bay, R.D. 1, Takaka.7172
ZL2TIV	Ballantine, R. N., 31 John Sims Drive, Broadmeadows, Wellington.6004
ZL2TIW	Anderson, A. E., 76 Skibo Street, Dunedin.9001
ZL2TIX	Smith, T. R., 31 Bird Grove, Stokes Valley.6306
ZL2TIY	Harmsworth, J.(Mrs), Jonkers Road, Waitakere, Auckland.1230
ZL2TIZ	Collins, G. N., 26 Harris Street, Marton.5151
ZL2TJA	Walker, A. L., Flat 3, 216 Annesbrook Drive, Nelson.7001
ZL2TJB	Fitzsimons, D. F., 44a Waimea Road, Nelson.7001
ZL2TJC	Wakely, B., 15 Greenhill Road, Nelson.7001
ZL2TJF	Graham, G. J., 32 Caldwell Road, Woodbourne, Blenheim.7301
ZL2TJG	Laing, I. J., "Longridge", Kaiwaiwai, R.D. 1, Featherston.5952
ZL2TJH	Whittington, A. N., 13 Hereford Street, Wanganui.5001
ZL2TJI	Bould, R. M., 97 Ohariu Road, Wellington.6004
ZL2TJJ	Hannon, G. J., 600 Massey Street, Hastings.4201
ZL2TJK	Williams, G. C., 18 Ronberg Street, Palmerston North.5301
ZL2TJL	Thompson, R. E., 25 Findlay Street, New Plymouth.4601
ZL2TJM	Baker, R. E., 10 Harris Street, Feilding.5600
ZL2TJN	Cristensen, T. G., 36 Surrey Street, Taradale, Napier.4001
ZL2TJO	Brice, D., 43 Fairview Avenue, Feilding.5600
ZL2TJP	Bryant, P., 62 Clarence Street, Vogeltown, Wellington.6002
ZL2TJQ	Hawker, B. C., 26 Hawkeswood Place, Avonhead, Christchurch.8004
ZL2TJS	Lowe, C. N., c/- Bariod Ltd, P.O.Box 3137, Fitzroy, New Plymouth.4630
ZL2TJT	Schmidt, J. T., 9 Ponderosa Grove, Maoribank, Upper Hutt.6401
ZL2TJU	Singleton, R. J., 9 Westleigh Way, Newlands, Wellington.6004
ZL2TJV	Pointon, A. C., 21 Balgownie Avenue, Gonville, Wanganui.5001
ZL2TJW	Stewart, K. F., 1 Caversham Road, Mosston, Wanganui.5001
ZL2TJX	Evans, E. T., 16 Davidson Avenue, Napier.4001
ZL2TKA	Rickards, C. M., 21a Longview Drive, New Plymouth.4601
ZL2TKC	Dannatt, R., 83e Govett Avenue, New Plymouth.4601
ZL2TKD	Willis, W. J. F., 16 Langbein Street, Nelson.7001
ZL2TKE	McLean, W. P., 44a Ranui Road, Remuera, Auckland.1105
ZL2TKF	Hodge, D. M., 19 King Street, Feilding.5600
ZL2TKG	Wright, M. A., 28 Cunliffe Street, Johnsonville, Wellington.6004
ZL2TKI	Sanson, I. M., see ZL7TKI.
ZL2TKJ	Harmsworth, A. G., Jonkers Road, Waitakere, Auckland.1230
ZL2TKK	Siegenthaler, J. B., 3/3 Ngaio Gorge Road, Wellington.6004
ZL2TKL	Thornton, W. H., 404 Hart Drive, Hastings.4201
ZL2TKM	McRoberts, K., 49 Arrow Street, Nelson.7001
ZL2TKN	Rowe, C. G., 117 Hamlet Street, Stratford.4700
ZL2TKP	Fleming, A. J., 33 Clifton Drive, Waitara.4656
ZL2TKR	Brown, R. G., 64b Tipahi Road, Nelson.7001
ZL2TKT	Verry, A. C., Waitotara Store, Waitotara.5180
ZL2TKV	Burns, F. N. R., 1010 Waipuna Street, Hastings.4201
ZL2TKW	Butt, A. J., 26 Hornsey Road, Melrose, Wellington.6003
ZL2TKX	Lillis, S. M., 21a Pilmuir Street, Lower Hutt.6301
ZL2TKY	Pattle, K. A., 10 Woodstock Terrace, Tawa.6203
ZL2TKZ	Wilkinson, K. T., 3/77 Ocean Beach Road, Mount Maunganui.3002
ZL2TLA	Benis, H. G., 165 Rosetta Road, Raumati Beach.6150
ZL2TLB	Biller, J. S., 25 Kaitangata Crescent, Kelston, Lower Hutt.6301
ZL2TLC	Wills, M. J., P.O.Box 31-227, Lower Hutt.6300
ZL2TLD	McAllister, G. B., 101 Glenmore Street, Kelburn, Wellington.6005
ZL2TLE	Ramsay, K. J., 41 Franklyn Road, Tawa, Wellington.6203
ZL2TLF	Sargent, D. J., Motukawa Road, R.D. 7, Inglewood.4651
ZL2TLH	Barber, M. B., 136 Mark Avenue, Grenada Village, Wellington.6004
ZL2TLI	Wood, M. K., 20 Chetwode Grove, Newlands, Wellington.6004
ZL2TLJ	Jones, B. L., 11 Turville Crescent, Newlands, Wellington.6004
ZL2TLL	Wallace, D. P., 149 Orangi Kaupapa Road, Wellington.6005
ZL2TLM	Fowles, G. F., 90 Clarence Cox Crescent, Napier.4001
ZL2TLN	Nicholson, C. L., 1b/186 The Terrace, Wellington.6001
ZL2TLO	Gough, M. Q., 24 Atawhai Drive, Nelson.7001
ZL2TLQ	Baker, I. H., 42b Waihi Road, Hawera.4800
ZL2TLR	Smith, B. W., 261a Riverside Drive, Lower Hutt.6301
ZL2TLS	Prout, S. A., 23 Roy Terrace, New Plymouth.4601
ZL2TLT	Riches, P. C., 28 Devon Street, Kelburn, Wellington.6005
ZL2TLU	Nicholls, R. M., 41 Nevada Road, Hamilton.2001
ZL2TLV	Dickson, M. P., 236 Victoria Avenue, Palmerston North.5301
ZL2TLW	Gifford-Moore, R. J., 395 Mahurangi East Road, Snells Beach, Warkworth.1490
ZL2TLY	Gunn, J. A., Main South Road, Manutahi.4800
ZL2TLZ	Donnell, A., 73 Ngaio Street, Waikanae.6154
ZL2TMC	Savory, M. O., 15 Mana Avenue, Titahi Bay.6202
ZL2TMD	Charlton, G. H., 10 Drayton Place, Palmerston North.5301
ZL2TME	Jones, S E., 38 Alfred Street, Nelson.7001
ZL2TMF	Saynor, E. K., 62 Kamahi Street, Stokes Valley.6306
ZL2TMI	Lill, V. E., 33 Tawa Terrace, Tawa.6203
ZL2TMJ	Major, G. M., 7 Colonial Drive, Palmerston North.5301
ZL2TML	Willis, W. P., 106 Lawrence Crescent, Hillpark, Manurewa.1702
ZL2TMM	Green, J. W., 40 Bancroft Terrace, Newlands, Wellington.6004
ZL2TMN	Hindley, J., 7 Kavanagh Place, Havelock.7371
ZL2TMQ	Stewart, I. L., 5 Mandalay Flats, R.D. 9, Whangarei.0121
ZL2TMS	Pallesen, P. A., 808n Riverslea Road, Hastings.4201
ZL2TMT	Bondy, F., 24 William Street, Hataitai, Wellington.6003
ZL2TMU	McGhie, R. C., 8 Kashmir Avenue, Upper Hutt.6401
ZL2TMV	McAuliffe, P. N. G., 5 Takahe Place, Tokoroa.2392
ZL2TMW	Penney, L. J., 21a Weld Street, Blenheim.7301
ZL2TMX	Smith, C. F., 407 Princes Street, Hastings.4201
ZL2TMY	Hannan, P. E., 10 Mahana Road, Paraparaumu.6152
ZL2TMZ	Woodfield, N. C., Hepi Terrace, Whakapapa Village, Mt. Ruapehu.2650
ZL2TNB	Langford, K. H., 46 East Street, Greytown.5953
ZL2TNC	Jago, J. N., 63 Reimenschneider Street, Manaia.4851
ZL2TND	Beeston, S., 39 Southgate Road, Island Bay, Wellington.6002
ZL2TNF	Clarkson, K. G., 4 Coast Road, Kawakawa Bay, Auckland.1750
ZL2TNG	Burrell-Smith, M. L. C., 5 Kinlock Crescent, Blenheim.7301
ZL2TNI	Sutton, T. D., 17 Tory Street, Nelson.7001
ZL2TNJ	Crook, C. M., 72 Fraser Avenue, Johnsonville, Wellington.6004
ZL2TNK	Dannatt, M. E., 5 Grenville Street, Waiwhetu, Lower Hutt.6301

ZL2TNL	Shearer, D. B., c/- 80 Noel Street, Cambridge.2351
ZL2TNM	Stokes, D. C., 58c Norway Street, Kelburn, Wellington.6005
ZL2TNN	Dobson, H. M., 76 Valley Road, Gisborne.3801
ZL2TNP	McLachlan, I. M., 38 Ranfurly Street, Gisborne.3801
ZL2TNQ	Plowman, T. S., 141 Thompson Road, Napier.4001
ZL2TNR	Hopkins, D. J., c/- Wainuiomata Post Office, Wainuiomata.6330
ZL2TNS	Huttley, J. D., 19 Duncan Avenue, Te Atatu South, Auckland.1208
ZL2TNT	Scott, G. W., R.D. 4, Palmerston North.5321
ZL2TNU	Devon, D. R., 2 Tweed Street, Oamaru.8901
ZL2TNW	Earl, T. H., 148 Kelburn Parade, Wellington.6005
ZL2TNX	Brown, K. J., 1a Limmer Place, Browns Bay, Auckland.1310
ZL2TNY	McIntosh, R. W., 35 McHardie Street, Upper Hutt.6401
ZL2TNZ	Eade, P. D., 2/32 Riverbend Road, Napier.4001
ZL2TOB	Loeffellechner, E., 6 Cunliffe Street, Johnsonville, Wellington.6004
ZL2TOC	Atkins, P. D., 18 Apu Crescent, Lyall Bay, Wellington.6003
ZL2TOD	Robinson, M. G., 5 Mars Avenue, Sandringham, Auckland.1003
ZL2TOE	Graham, P. R., R.D. 1, Lyttelton.8033
ZL2TOF	Vincent, P. C., 7 Pharazyn Street, Feilding.5600
ZL2TOG	De Grey, A. B., 156 Brooklands Road, New Plymouth.4601
ZL2TOH	Fulton, J. E. R., 22a Trelissick Crescent, Ngaio, Wellington.6004
ZL2TOK	Waldron, D. M., 10 Reserve Road, Plimmerton.6251
ZL2TOL	Buchanan, G. C., 17 Humphries Place, Palmerston North.5301
ZL2TOO	Godfrey, C. J., 174 Tramway Road, Hamilton.2001
ZL2TOP	Coley, N., 84 Main Road, Wainuiomata.6305
ZL2TOR	Woods, D. J., R.D. 5, Ngaio Road, Feilding.5600
ZL2TOT	Bowman, P. W., 4 Grange Park Avenue, Raumati South.6150
ZL2TOU	Brunton, R. G., 19 Gladstone Street, Woodville.5473
ZL2TOV	Ridge, J. D., 5 Papawai Place, Palmerston North.5301
ZL2TOW	Ellis, N. M., 88b Freyberg Street, Otumoetai, Tauranga.3001
ZL2TOY	Banks, G. J., 115 Glenpark Avenue, New Plymouth., P.O.Box 106, New Plymouth.4600
ZL2TOZ	O'Donnell, M. J., 9 Coles Crescent, Papakura.1703
ZL2TPA	Robbie, D. R., 50 Pukepoto Road, Kaitaia.0500
ZL2TPB	Cushen, T. M., 38 Esplanade, Westshore, Napier.4001
ZL2TPC	Sanders, K. D., 38 Fraser Street, Wainuiomata.6305
ZL2TPD	Tingey, S. A., 18 Mataura Grove, Wainuiomata.6305
ZL2TPE	Clarke, G. E., 57 Kauri Street, Miramar, Wellington.6003
ZL2TPF	Gordon, R. G., 17 Conifer Place, Te Puke.3071
ZL2TPH	Allen, J. R., 6 Fantail Grove, Belmont, Lower Hutt.6301
ZL2TPI	Greenbank, I. J., 47 Woodland Road, Johnsonville, Wellington.6004
ZL2TPJ	Jardine, B. J., 31 Parkland Crescent, Palmerston North.5301
ZL2TPK	Stoks, F. G., 17 Adelaide Road, Petone.6303
ZL2TPM	Dawson, E. B. H., 75 Muratai Road, Eastbourne.6304
ZL2TPN	Dormer, P. C. (Miss), 8 Awhiorangi Promenade, R.D. 1 Henderson, Auckland.1208
ZL2TPO	Jackson, C. D., 10 Greenwich Grove, Stokes Valley.6306
ZL2TPP	Caldwell, J. D., 36 Rangiora Terrace, Nelson.7001
ZL2TPQ	Browning, K. F., 56 Cole Street, Dannevirke.5491
ZL2TPR	McLennan, A. A., c/- D. Fussell, 71 Hataitai Road, Wellington.6003
ZL2TPS	Purdie, B. E., 65 Hedges Street, Sanson.5450
ZL2TPT	Harris, H. B., Mt Adde R.D. 4, Blenheim.7321
ZL2TPU	Watt, T. W., 4 Compass Way, Whitby, Paremata.6201
ZL2TPW	Annett, D. A., 3 Sutherland Avenue, Upper Hutt.6401
ZL2TPY	Mundell, K. W., 6 Alberta Road, New Plymouth.4601
ZL2TPZ	Martin, R. J., 10 Godley Street, Waterloo, Lower Hutt.6301
ZL2TQA	Nixon, P. J., 14 Huia Road, Days Bay, Eastbourne.6304
ZL2TQD	Fulton, H. R., 13 Staysail Place, Whitby, Paremata.6201
ZL2TQF	Edridge, S. R., 5 Warwick Avenue, Hamilton.2001
ZL2TQG	Newton, P. J., Flat 82, 70 Hobson Street, Wellington.6001
ZL2TQH	Woolf, J. C., 141 Marine Parade, Wellington.6003
ZL2TQI	Tucker, N. R. A., Napier Road, Havelock North., P.O.Box 8038, Havelock North.4231
ZL2TQJ	Gear, W. E., 42 Abraham Heights, Nelson.7001
ZL2TQK	Maxwell, C. H., 8 Martin Grove, Lower Hutt.6301
ZL2TQL	Holdaway, R. J., 21 Richardson Avenue, Blenheim.7301
ZL2TQN	Paris, S. J., 18 York Street, Masterton.5901
ZL2TQO	Neale, C. R., 1/119 Sheenan Street, Gisborne.3801
ZL2TQP	Quinn, C. J., 29 Dominion Park Road, Johnsonville, Wellington.6004
ZL2TQQ	Hill, H. R., 3a Balliol Drive, Tawa.6302
ZL2TQS	Barraud, R. W., 11 Culverodn Street, Hamilton.2001
ZL2TQU	Atkinson, D. T., 23 James Cook Drive, Whitby, Wellington.6253
ZL2TQV	Barnett, A. D., 25 Tattersfield Street, Hamilton.2001
ZL2TQX	Rushton, B. H., 36 Orr Crescent, Lower Hutt.6301
ZL2TQY	Hood, R., 24 Seddon Street, Palmerston North.5301
ZL2TQZ	Harkness, P. D., 357 College Street, Palmerston North.5301
ZL2TRC	Barth, M. J., 3 Holmwood Road, Christchurch.8001
ZL2TRD	Smith, P. R., Hatuma, R. D. 1, Waipukurau.4176
ZL2TRE	Jennings, S. B., 66 Pine Avenue, Upper Hutt.6401
ZL2TRG	Omer, P., 88 Valley Road, Gisborne.3801
ZL2TRH	Darby, P. R., 25 South Road, New Plymouth.4601
ZL2TRI	Harper, E. J., 233 The Esplanade, Petone.6303
ZL2TRL	Jarvis, M. D., 89b Linton Street, Palmerston North.5301
ZL2TRM	MacKenzie, H. R., 23 Balgownie Avenue, Wanganui.5001
ZL2TRO	Campbell, J. D. Mc., 9a Motueka Street, Ngaio, Wellington.6004
ZL2TRP	Pyne, R. E., 12 Tweed Road, Papakowhai, Paremata.6250
ZL2TRQ	McKenzie, N. A., 1 Colenso Avenue, Napier.4001
ZL2TRR	Cameron, H. K., 6 Somerset Grove, Waitarere Beach.5550
ZL2TRS	Jamieson, P. A., 95a Stout Street, Gisborne.3801
ZL2TRV	Yaldwyn, J. S. C., 107 Kanpur Road, Broadmeadows, Wellington.6004
ZL2TRW	Richards, D. C., c/- 2/24 Eltham Road, Kohimarama, Auckland.1105
ZL2TRX	Apperley, L. R., 6 Kowhai Avenue, Palmerston North.5301
ZL2TRY	Stewart, A. H., Turakina Road, Bulls, P.O. Box 3, Bulls.5452
ZL2TRZ	Tonkin, J. R., 15 Ahuriri Street, Strathmore Park, Wellington.6003
ZL2TSA	Bold, M. R., 162 West Street, Feilding.5600
ZL2TSB	Mills, G. R. A., 2 Selwyn Street, Levin.5500
ZL2TSC	Pollock, G. M., 40 Punga Street, Tangimoana.5450
ZL2TSD	Keen, N. K. M., P.O.Box 484, Whakatane.3400
ZL2TSE	Thompson, A. B. J., 164 Tasman Street, Nelson.7001
ZL2TSF	Chisholm, W. J. R., 29 Sutherland Road, Melrose, Wellington.6003
ZL2TSG	Brader, J. M., 22 Mawson Street, Waiwhetu, Lower Hutt.6301
ZL2TSH	Codd, B. A., 13 Standish Street, Inglewood.4651
ZL2TSI	Allison, D. N., 5 Beauchamp Street, Linden.6203
ZL2TSJ	Jardine, S. J. A., 31 Parkland Crescent, Palmerston North.5301
ZL2TSK	Millard, G., 30 Akatarawa Road, Upper Hutt.6401
ZL2TSL	Jordan, B., Waingake Road, Manutuke.3891
ZL2TSM	Brown-Douglas, F. A., Flat 4, 68 Oban Street, Wellington.6001
ZL2TSN	Parker, G. T., 2/46 Highland Park Drive, Howick.1705
ZL2TSO	Goodwin, D. R., 46 Caius Avenue, Wanganui.5001
ZL2TSP	Salt, B. R., 514a Fenwick Street, Hastings.4201
ZL2TSR	Meharry, A. G., 15 Tui Crescent, Maunu, Northland.0130
ZL2TSS	Tse, A. E., Buller Road, Levin.5500
ZL2TST	Bernon, B. A., 7 Spur Grove, Titahi Bay.6202
ZL2TSU	Bristow, E. J., 77 Matcher Street, Wanganui.5001
ZL2TSV	Clarke, E. W., 72 Reynolds Street, Taita, Lower Hutt.6301
ZL2TSW	Gibellini, S. P., c/- Natts, RNZAF Base, Wigram, Christchurch.8030
ZL2TSX	Mitchell, A. R. G., 39 Birmingham Street, Palmerston North.5301
ZL2TTA	McNeil, I. J., 111 Norana Road, Upper Hutt.6401
ZL2TTC	Adamson, F. R., 26A Hargreaves Street, Wellington.6002
ZL2TTD	Preston, P. J., 51 Coromandel Street, Newtown, Wellington.6002
ZL2TTE	Crampton, J. F., 40 Regens Street, Blenheim.7301
ZL2TTF	Christianson, N. J., 13 Cecil Road, Wadestown, Wellington.6001
ZL2TTG	Sule, J. E., 6 Antico Street, Melrose, Wellington.6003
ZL2TTH	Ereckson, D. C., 352 Main Road, Tawa.6203
ZL2TTI	Hancock, G. D., 8 Ferguson Street, Levin.5500
ZL2TTJ	Johnston, K. A., 21 Madras Street, Khandallah, Wellington.6004
ZL2TTK	Gridley, N. J., 11 Humphries Street, Greytown.5953
ZL2TTL	Watkins, K. R., 19a Carthew Street, Okato.4652
ZL2TTN	Speight, L. G., 2/9 Osier Road, Greenmeadows, Napier.4001
ZL2TTO	Ede, A. R., 126 Epuni Street, Lower Hutt.6301
ZL2TTQ	Clark, L. K., Roberts Line, R.D. 8, Palmerston North.5321
ZL2TTS	Jansen, C. T. F., 10 Karepa Street, Brooklyn West, Wellington.6002
ZL2TTV	Petch, J. R., 9 Newcastle Street, Palmerston North.5301
ZL2TTW	Campion, S. G., 5 Sandhurst Way, Chartwell, Wellington.6004
ZL2TTX	Walker, R. S., 9 Milne Terrace, Island Bay, Wellington.600
ZL2TTY	Boyce, M. L. P., Awahuri, R.D. 6, Palmerston North.5321
ZL2TTZ	McDermid, G. V., 4/123 Knighton Road, Hamilton.2001
ZL2TUA	Smith, K. V., c/- 143 King Street, Rangiora.8254
ZL2TUB	Moorcroft, T. K., 9 Clarence Street, Gisborne.3801
ZL2TUC	Forrest, I. E., 41 Norfolk Crescent, Feilding.5600

ZL2TUD	Futter, R. J., 4 Van der Velden Way, Horokiwi, Wellington.6301
ZL2TUF	Hastie, L. M., Koputara Road, Himatangi Beach, R.D. 11, Foxton.5551
ZL2TUH	Irwin, W. P. M., 26 Bronte Street, Nelson.7001
ZL2TUI	Bergen, E. A., 4 Armagh Terrace, Marton.5151
ZL2TUJ	Bulleid, J. L., 65a Kidson Terrace, Cashmere, Christchurch.8002
ZL2TUM	Marsh, H. A., 44 Hautoki Street, New Plymouth.4601
ZL2TUP	Cullen, E. R., 17 Cadman Street, Dannevirke.5491
ZL2TUQ	Cuttriss, H. N., 75a Tiber Street, Wellington.6002
ZL2TUR	Banks, M., 66 Cumberland Street, New Plymouth.4601
ZL2TUS	Kirkness, M. A., 54 Rimu Street, Wanganui.5001
ZL2TUT	McPherson, D. B., 19 Alexandra Street, Marton.5151
ZL2TUU	Davis, R. W., 10 Maire Street, Otaki.6171
ZL2TUV	Jepson, S. J., Forest Lakes Road, R.D. Otaki.6171
ZL2TUW	Humphreys, E. M., 16 Fergusson Street, Stoke, Nelson.7001
ZL2TUX	Breen, J. P., 31 Waiwhetu Road, Lower Hutt.6301
ZL2TUY	Prankerd, D. G., R.D, Takapu Road, Tawa.6203
ZL2TUZ	Turner, P. D., 42 Titiromoana Road, Korokoro, Petone.6303
ZL2TVA	Burney, G. L., 6 Kennedy Grove, Stokes Valley.6306
ZL2TVB	Seed, B. V., 42 Omapere Street, Whitby, Wellington.6201
ZL2TVC	Griffiths, O. R., 86 Coopers Road, Greerton, Tauranga.3001
ZL2TVE	Gowan, A. J., 10 Ranfurly Street, Dannevirke.5491
ZL2TVG	Havell, K. G. L., 23 George Street, Wanganui.5001
ZL2TVH	Topliss, P. G., 7 Victoria Heights, Nelson.7001
ZL2TVI	Spittle, G. D., 12 White Street, Taradale.4001
ZL2TVJ	Bodley, R. A., 158 Washington Avenue, Wellington.6002
ZL2TVK	Hill, K. M., 29 Holdsworth Avenue, Upper Hutt.6401
ZL2TVM	McAdam, N. M., 38 Shakespeare Avenue, Upper Hutt.6401
ZL2TVO	Scott, P. A. L., 28 Jefferson Place, Brookfield, Tauranga.3001
ZL2TVP	Eden, A. D., 5 Norwich Street, Stoke, Nelson.7001
ZL2TVQ	Wilson, M. L., 2/290 Wakefield Street, Wellington.6001
ZL2TVR	Babington, J. E., 10 Moana Street, Ohawe Beach, Hawera.4800
ZL2TVS	Mahon, P. D., 100 Mercury Way, Whitby, Paramata.6253
ZL2TVT	Jenkins, A. R., 13 Selwyn Street, New Plymouth.4601
ZL2TVV	Newland, P. B., 25a Tawa Terrace, Tawa.6203
ZL2TVW	Westhead, M. L., Woodwork Section, RNZAF Base, Ohakea.5450
ZL2TVX	Cooke, R. J., 9 Gaff Place, Whitby, Porirua.6201
ZL2TVY	Smith, R. L., 5 Chilka Street, Berhampore, Wellington.6002
ZL2TVZ	Janes, P. A. F., 8a School Road, Gisborne.3801
ZL2TWA	Harrall, A. E., 52 Montgomery Avenue, Karori, Wellington.6005
ZL2TWB	Fell, L. J., 123 Hoon Hay Road, Christchurch.8002
ZL2TWC	Fleming, C. J., 8/340 Tinakori Road, Thorndon, Wellington.6001
ZL2TWD	Feist, D. M., 2 Arnot Avenue, Upper Hutt.6401
ZL2TWE	McIntosh, D. C., 3/171 Portland Road, Remuera, Auckland.1105
ZL2TWG	Baxter, G. A., 218 Major Drive, Lower Hutt.6301
ZL2TWI	Ward, A. T., 82 Karaka Street, Wanganui.5001
ZL2TWK	Siddall, R. M., 139 Bucklands Beach Road, Bucklands Beach, Auckland.1704
ZL2TWL	Williams, R. E., 118 Cavell Street, Dunedin.9001
ZL2TWM	Wilson, C. I., 11 Ashton Terrace, Castlecliff, Wanganui.5001
ZL2TWN	Foubister, M. W., 15 Marlborough Street, Levin.5500
ZL2TWO	Jennings, J. P. H., 14 Wairere Road, Belmont, Lower Hutt.6301
ZL2TWP	Aimers, A. G., Boyce Street, Renwick.7352
ZL2TWQ	Fryer, R. J., 10 Mahana Road, Paraparaumu Beach.6153
ZL2TWR	Corkery, P. J., 9 Beech Crescent, Hillcrest, Hamilton.2001
ZL2TWS	Wysocki, J. M., 115a Epuni Street, Lower Hutt.6301
ZL2TWT	Purton, S. D., 376 Botanical Road, Palmerston North.5301
ZL2TWU	Evan, D. F., 184 No. 3 Line, Wanganui.5001
ZL2TWW	Tullock, N. G., 24 Field Street, Silverstream, Upper Hutt.6402
ZL2TWY	Neal, N. P., Gimblett Road, R.D. 5, Hastings.4221
ZL2TWZ	Murphy, P. C., 274 Songer Street, Stoke, Nelson.7001
ZL2TXC	White, R. S., 410 Botanical Road, Palmerston North.5301
ZL2TXD	Hogan, T. J., 19 Ruskin Road, Newlands, Wellington.6004
ZL2TXE	Waters, R. J., 32 Taft Street, Brooklyn, Wellington.6002
ZL2TXG	Muldrock, J. H., 9 Station Road, Waverley.9001
ZL2TXJ	Hoare, M. F., 158 Mark Avenue, Grenada, Wellington.6006
ZL2TXK	Duncan, G. R., 59 Harold Holt Avenue, Onekawa.4001
ZL2TXL	Eastergaard, A. G., 12 Westpoint Avenue, Lower Hutt.6301
ZL2TXN	Prentice, R. J., 178 George Street, Stokes Valley.6306
ZL2TXP	Prentice, A. J., 17 Fernhill Terrace, Wadestown, Wellington.6005
ZL2TXS	MacGregor, S. J., 98b Wadestown Road, Wadestown, Wellington.6001
ZL2TXT	Cleland, W. J., 212 Ferguson Street, Palmerston North.5301
ZL2TXU	Anderson, J. G., 64 Reid Avenue, Hawera.4800
ZL2TXV	Baldwin, A. N., 8 Hobson Place, Palmerston North.5301
ZL2TXW	Sunnex, T. H., 50 Kaka Street, Nelson.7001
ZL2TXX	Penney, B. J., 20 Konini Street, Nelson.7001
ZL2TXY	Duncan, R. G., 3 Payling Lane, Christchurch.8005
ZL2TXZ	Spearing, G. G., 17 Rugby Road, Birkenhead, Auckland.1310
ZL2TYA	De Burgh, R. J., 97 Makino Road, Feilding.5600
ZL2TYB	Lockyer, R. H., 11 Trevelyan Street, Napier.4001
ZL2TYD	Good, C. L., 80 Waimumu Road, Massey, Auckland.1208
ZL2TYE	Tudor, G. T., 11 Tauranga Place, Waitara.4656
ZL2TYF	Scott, H. J., 10 Waimea Road, Nelson.7001
ZL2TYG	McLean, H. R., 19 Turriff Crescent, Linden, Wellington.6203
ZL2TYH	Sulzberger, J. B., Pukearuhe Road, R.D. 44, Urenui.4655
ZL2TYI	Tayler, L. R., 2 Terrace Grove, Paparangi, Wellington.6004
ZL2TYJ	Symon, M. D., 27 Howard Road, Taradale, Napier.4001
ZL2TYL	Robertson, K. E., c/- Greytown Public Hospital, Greytown.5953
ZL2TYM	Milson, R. T., 16 Nikau Street, Eastbourne.6304
ZL2TYN	Rinsma, H. R., 179 Quebec Road, Nelson, P.O. Box 617, Nelson.7020
ZL2TYO	Fitzsimons, B. J., 44a Waimea Road, Nelson.7001
ZL2TYQ	Frith, M. W., 207 Vogel Street, Palmerston North.5301
ZL2TYR	Robertson, D. R., 117 Spinnaker Drive, Whitby, Paramata.6250
ZL2TYS	Laird, E. J., 79 Totara Crescent, Lower Hutt.6301
ZL2TYT	Wilde, R. G., Upper Pakihikura Road, R.D. 3, Hunterville.5161
ZL2TYU	Abernethy, R. J., 20 Zetland Terrace, Kelburn, Wellington.6005
ZL2TYX	Cairns, M. H., 4 Terrace Street, Aramoho, Wanganui.5002
ZL2TYY	Headifen, T. G., 19 Fincham Road, Raumati Beach.6150
ZL2TYZ	Bell, G. R., Elsthorpe, R.D. 2, Otane, Napier.4172
ZL2TZA	Watts, D. M., 38 Albert Street, Palmerston North.5301
ZL2TZC	Rumens, K. W., 19 Duval Grove, Tawa, Wellington.6203
ZL2TZE	Conza, P. J., 4 McFarlane Place, Blenheim.7301
ZL2TZF	Hutley, D. A., 5 Westbourne Road, Remuera, Auckland.1105
ZL2TZG	Sargent, G. R., Motukawa Road, R.D. 7, Inglewood.4651
ZL2TZH	Helson, N. G., 44 Kahu Road, Fendalton, Christchurch.8004
ZL2TZI	Harmsworth, W. A., Jonkers Road, Waitakere, Auckland.1208
ZL2TZL	Weston, G. R., 2 Pirinoa Street, Feilding.5600
ZL2TZN	Springer, M. J., 33 Duigan Street, Wanganui.5001
ZL2TZO	Martin, G. T., 13 Caemarvon Drive, Flaxmere.4201
ZL2TZQ	Thompson, R. M., R.D. 8, Pungarehu.4650
ZL2TZS	Barriball, O. P., Pungarehu Road, Pungarehu.4650
ZL2TZT	King, M. J., 108 Brougham Street, Mt Victoria, Wellington.6001
ZL2TZW	Miles, I. D., 82 Mill Street, Marton. Postal: P.O. Box 311, Marton.5151
ZL2TZX	Hoskins, R. H., 25 Ludlam Crescent, Lower Hutt.6301
ZL2TZZ	Meek, E. P., 71 Memorial Avenue, Christchurch.8005
ZL2UAA	Bissett, W. L., 3/19 Parrish Road, Sandringham, Auckland.1003
ZL2UAC	Pedder, R. A., 8 Thomas Hook Street, Tawa.6203
ZL2UAD	Emerson, W. R., 30 Heatherlea Heights, Feilding.5600
ZL2UAF	Hill, M. B., 25a Woodmancote Road, Khandallah, Wellington.6004
ZL2UAG	Rumsey, D. C., c/- 83 Atkinson Avenue, Otaki.6171
ZL2UAH	Butler, N. A., 470 College Street, Palmerston North.5301
ZL2UAJ	Newell, M. C., 21 Joseph Street, Palmerston North.5301
ZL2UAK	Stewart, C. W., 16 Jillian Drive, Ranui.1208
ZL2UAL	Huberts, K., 24 Lysnar Street, Gisborne.3801
ZL2UAM	Pollard, P. B., 29 Seddon Crescent, Gisborne.3801
ZL2UAN	Wills, A. R., 66 Park Road, Belmont, Lower Hutt.6301
ZL2UAO	Murphy, G. R., 274 Songer Street, Stoke, Nelson.7001
ZL2UAQ	McCrea, D. J., 11 Dalstram Grove, Palmerston North.5301
ZL2UAS	Slater, D. J., 35 Wyndham Road, Ashhurst.5451
ZL2UAT	Griffith, R. L., 81 River Terrace, Brightwater, Nelson.7001
ZL2UAU	Evans, G. R., 30 Margaret Road, Raumati Beach.6150
ZL2UAW	James, A. R., 413 Frederick Street, Hastings.4201
ZL2UAY	Terris, C. A., 9 Kerr Avenue, Cobden, Greymouth.7850
ZL2UAZ	Pearless, D. H., 107 McLeod Street, Upper Hutt.6401
ZL2UBA	Maitland, I. J., P.O.Box 743, Wanganui.5001
ZL2UBB	Gibson, R. I., 31 Hobart Street, Wellington.6003
ZL2UBC	Vidulich, M. J., Flat 6, 71 Firth Street, Hamilton.2001
ZL2UBD	Stern, N. G., Kopane, Main Road, R.D. 6, Palmerston North.5321
ZL2UBE	Davies, R. G., 12 Staysail Place, Whitby.6201
ZL2UBF	Graham, R. A., 15 Kaituna Street, Palmerston North.5301

ZL2UBG	Lowes, C. W., 27 St Hill Lane, Havelock North.4201
ZL2UBH	Cole, L. R., 8 London Road, Korokoro, Petone.6303
ZL2UBI	Terris, R. D., 45 Marlowe Street, Stoke, Nelson.7001
ZL2UBJ	Curran, B. I., c/- Blockhouse, Pungarehu Road, Pungarehu.4650
ZL2UBK	Webber, D., 4 Victory Crescent, Tawa.6203
ZL2UBM	Taylor, G. J. W., Hammericks Road, R.D. 3, Blenheim.7321
ZL2UBN	Briggs, A. G., 580 Lowe Street, Hastings.4201
ZL2UBO	Grenfell, S. K., 2/15 Tahi Street, Miramar, Wellington.6003
ZL2UBP	Riordan, I. M., Upper Takaka, Nelson.7172
ZL2UBQ	Freer, R. I. R., 240 Kennedy Road, Napier.4001
ZL2UBS	Scott, G. H., 140 Epuni Street, Lower Hutt.6301
ZL2UBU	Howie, I. M. C., 9 Trelissick Crescent, Ngaio, Wellington.6004
ZL2UBX	Grubner, L., 16 Virginia Grove, Brooklyn, Wellington.6002
ZL2UBZ	Gaudin, G. W., 18 Trafalgar Street, New Plymouth.4601
ZL2UCA	Gilchrist, R. J., 61 Heta Road, New Plymouth.4601
ZL2UCB	Rimmer, B. J., 27 Ryan Crescent, Greenmeadows East, Napier.4001
ZL2UCD	Calvert, D. A., Fabians Road, R.D. 1, Greytown.5953
ZL2UCE	Hursthouse, D. E., 24 Duart Road, Havelock North.4201
ZL2UCF	Dewar, A. M., 248a Ohiro Road, Brooklyn, Wellington.6002
ZL2UCG	Birchall, O. J., 123 Winchester Street, Ashhurst.5451
ZL2UCI	Rawdon, P. D., 14 Morrison Grove, Stokes Valley, Lower Hutt.6306
ZL2UCJ	Birt, K. J., 103 Victoria Street, Hawera.4800
ZL2UCL	White, R. J., 14a Howard Street, Gore.9700
ZL2UCM	Mordecai, D. M. R., 257 Mill Road, Otaki.6171
ZL2UCN	Burston, E. S. D., Pakihikura, R.D. 3, Hunterville.5161
ZL2UCO	Evans, B., South Featherston Road, R.D. 1, Featherston.5952
ZL2UCP	Doney, G. I., 32 D'Arcy Road, Wanganui.5001
ZL2UCS	McPherson, M. E., 19 Alexandra Street, Marton.5151
ZL2UCT	Oborn, D. E., 126 Constable Street, Newtown, Wellington.6002
ZL2UCW	Bray, D. K., Mai Road, Mauriceville.5990
ZL2UCX	Davis, S. I., 37 Golf Road, Tahunanui, Nelson.7001
ZL2UCZ	Barrow, B. A., 47 Wood Street, Wainuiomata.6305
ZL2UDA	Barnes, B. R., 7 Monowai Place, Wanganui.5001
ZL2UDB	Learmonth, B. H., Main Road, Kopane, R.D. 6, Palmerston North.5321
ZL2UDD	Reese, L. W. J., 50 Harold Holt Avenue, Napier.4001
ZL2UDE	Senior, R. J., 34 Lahore Street, Wairoa.4192
ZL2UDG	Phillips, R. S., 42 Caldwell Road, Woodbourne, Blenheim.7301
ZL2UDH	Knebel, D. J., 28 Chartwell Drive, Crofton Downs, Wellington.6004
ZL2UDJ	Ritchie, L. T., 26 Maunder Street, Marton.5151
ZL2UDL	Nixon, T. J., 16 Balliol Drive, Tawa.6203
ZL2UDO	Nield, P. J., 4a Belgium Terrace, Gisborne.3801
ZL2UDP	Cooper, A. J., 6 Denholm Road, Napier.4001
ZL2UDQ	Mulligan, G. D., 68 Homewood Avenue, Karori, Wellington.6005
ZL2UDR	Cole, G. P., 58 Woodhouse Avenue, Wellington.6005
ZL2UDS	Durbridge, D. S., 19 Colombo Street, Palmerston North.5301
ZL2UDU	Parker, H. R., 59 Routley Crescent, Upper Hutt.6401
ZL2UDV	Lambert, J.(Mrs), 12 Betts Avenue, Masterton.5901
ZL2UDX	Lawn, M. J., 42 Gloaming Hill, Onepoto, Titahi Bay.6202
ZL2UDY	Heywood, B., 270 High Street, Eltham.4751
ZL2UDZ	Andrews, I. F., 11 Partridge Street, Taita, Lower Hutt.6301
ZL2UEA	Goldfinch, R. Q., 3 Ellerslie Avenue, Chedworth, Hamilton.2001
ZL2UEC	Packer, B. A., 10 Patna Street, Ngaio, Wellington.6004
ZL2UEF	Whittaker, J. W., 53 Cornwall Street, Masterton.5901
ZL2UEG	Thorp, R. J., 26 Southwark Avenue, Tamatea, Napier.4001
ZL2UEH	Steenhart, L., Cliff Road, R.D. 1, Kina, Upper Moutere.7152
ZL2UEI	McConnel, W. K., 8 Partington Place, Hamilton.2001
ZL2UEL	Evans, R., 30 Margaret Road, Raumati Beach.6150
ZL2UEQ	Berger, R., 38a Morley Street, New Plymouth.4601
ZL2UES	Payne, M. H., 24 Tutere Place, Wanganui.5001
ZL2UET	Wardell, D. M., 17 Halesowen Avenue, Sandringham, Auckland.1003
ZL2UEU	Smith, B. J., 19 Fieldstone Court, Northpark, Howick.1705
ZL2UEV	Tong, J., 44 Lakewood Avenue, Churton Park, Wellington.6004
ZL2UEW	Aurisch, P. J., 2 Taranaki Street, Wanganui.5001
ZL2UFA	Wilson, B. D., 35 Witako Street, Lower Hutt.6301
ZL2UFE	Vickers, M. P., 2 George Street, Eltham.4751
ZL2UFH	Huntingdon, R. J., 11 Thistle Street, Napier.4001
ZL2UFI	Gooding, M. S., P.O.Box 16, Featherston.5952
ZL2UFJ	Baker, G. C., 110 Wood Street, Palmerston North.5301
ZL2UFK	Johnston, W. K., 12 George Porter Apartments, Hopper Street, Newtown, Wellington.6001
ZL2UFL	Collard, M. T., 8 Reeves Close, Hamilton.2001
ZL2UFM	Lambert, A. C., 44 Strange Street, Waitara.4656
ZL2UFN	Blyde, G. R., 18 Egmont Street, Kaponga., P.O.Box 10, Kaponga.4752
ZL2UFP	Cordy, M., 122 Parkvale Road, Karori, Wellington.6005
ZL2UFR	Gibson, B. S., 8 Murtle Street, Omokoroa, R.D. 2, Tauranga.3021
ZL2UFS	Kent, A. A., 5 Raymond Terrace, Lower Hutt.6301
ZL2UFW	Baldwin, T. N., 158 Raleigh Street, R.D. 42, Waitara.4656
ZL2UFY	Whale, D. M., 4 Whakaririe Avenue, Westshore, Napier.4001
ZL2UFZ	Shore, R. I., Sandspit Road, R.D. 2, Warkworth.1492
ZL2UGC	Clark, B. A., 15 Deller Drive, Carterton.5951
ZL2UGF	Gratton, M. L., 31 Dominica Crescent, Grenada Village, Wellington.6004
ZL2UGG	Syme, D. R., 17 Rogers Road, Bay View, Napier.4001
ZL2UGH	Newport, C. W., 162 Kawai Street South, Nelson.7001
ZL2UGJ	Skinner, T. P., 17 Mahoe Avenue, Palmerston North.5301
ZL2UGL	Southam, J. E., 32 Kandy Crescent, Ngaio, Wellington.6004
ZL2UGM	Thomson, B. J., 16 Victory Crescent, Tawa.6203
ZL2UGN	Gregory, B., 46 Corinna Street, Porirua.6201
ZL2UGP	Pears, D. M., 17 Palmer Crescent, Heretaunga, Upper Hutt.6402
ZL2UGR	Smith, P. R., Unit 1 53 Clifford Road, Johnsonville, Wellington.6004
ZL2UGS	Jones, B. R., Ohaupo Road, R.D. 3, Ohaupo.2452
ZL2UGV	Senior, J. I. M., 34 Lahore Street, Wairoa.4192
ZL2UGW	Cumings, L. J., R.D. 2, Mauriceville.5990
ZL2UGY	Reisima, A. J., 31 Perry Street, Silverstream, Upper Hutt.6402
ZL2UIB	Morrish, I. D., 47 Everest Street, Khandallah, Wellington.6004
ZL2UIH	Briggs, G. J., 580 Lowe Street, Hastings.4201
ZL2UIK	Scott, D. E., 133 Harbour Road, Ohope.3454
ZL2UIL	Davidson, M. W., 16 Worcester Street, Levin.5500
ZL2UIN	Gregory, A., 46 Corinna Street, Porirua.6201
ZL2UIO	Mannering, W. L., 4 Kirner Street, Burwood, Christchurch.8009
ZL2UIQ	Baldwin, P. J., 12 Airedale Place, Waitara.4656
ZL2UIU	Belchamber, M., 19a Pine Street, Gisborne.3801
ZL2UIV	Candy, S. T. R., P.O. Box 56072, Linden, Wellington.6230
ZL2UIY	Baird, S. L. C., 22 The Sounding, Whitby.6253
ZL2UJG	Lowes, D. W., c/- D. McCormick, R.D. 3, Irwell, Leeston.8151
ZL2UJH	Roberts, W. S., 188 Nikau Street, Hastings.4201
ZL2UJI	Harvey, J. R., 801 Collinge Road, Hastings.4201
ZL2UJJ	Newson, J. R., 424 Huia Street, Hastings.4201
ZL2UJK	Kyle, J. P., 807 Anson Street, Hastings.4201
ZL2UJL	Riden, C. P., The Loop, Riverbend Road, Napier.4001
ZL2UJM	Manuel, J. D., 24 Avenue Road, Napier.4001
ZL2UJN	Sinclair, N. J., 8 Kapu Grove, New Plymouth.4601
ZL2UJO	Jorgensen, L. H., 265 South Road, R.D. 4, New Plymouth.4621
ZL2UJP	Robinson, P. H., 10b Barriball Street, New Plymouth.4601
ZL2UJQ	Makawe, T. D. J., 27 Clifton Drive, Waitara.4656
ZL2UJR	Rutherford, K. M., 3b Leatham Avenue, New Plymouth.4601
ZL2UJS	Sinclair, J. J., 8 Kapu Grove, New Plymouth.4601
ZL2UJT	Jury, N. J., 529c Carrington Road, R.D. 1, New Plymouth.4601
ZL2UJW	Warriner, J. R. K., 3 Christopher Way, Paparangi, Wellington.6004
ZL2UKC	Knight, S. J., 22a Sussex Street, Levin.5500
ZL2UKD	Fleming, T. A., R.D. 11, Foxton.5551
ZL2UKE	Williams, J. P., 25a Ikitara Road, Wanganui.5001
ZL2UKG	Leslie, G. M.(Mrs), 35 Robertson Street, Foxton.5551
ZL2UKI	Chandler, H. B., 34 Keith Street, Palmerston North.5301
ZL2UKR	Roberts, S. A., 84 Bell Street, Featherston.5952
ZL2UKS	Prentice, N. C., 79 Nottingham Street, Karori, Wellington.6005
ZL2UKT	Hughes, C. M., 741 High Street, Lower Hutt.6301
ZL2UKV	Thompson, D. A., 87 Norton Park Grove, Lower Hutt.6301
ZL2UKX	Hale, R. E., 23 Bellringer Crescent, Newlands, Wellington.6004
ZL2UKY	Vowell, D. J., 7 Silverton Grove, Churton Park, Wellington.6004
ZL2UKZ	Clapcott, P. J., 11 Trinidad Crescent, Grenada, Wellington.6004
ZL2ULB	Martin, G., 5 Atherstone Lane, Belmont, Lower Hutt.6301
ZL2ULC	Newson, I. S., 9 Mercury Way, Whitby, Wellington.6253

ZL2ULD Lennox, B. T., 40 Kanpur Road, Broadmeadows, Wellington.6004
ZL2ULE Moore, P. R., 73a Grafton Road, Roseneath, Wellington.6001
ZL2ULF Daley, B. K., 47 Chamberlain Road, Karori, Wellington.6005
ZL2ULG Van Toorenburg, L. M. L., 48 Phillip Street, Johnsonville, Wellington.6004
ZL2ULH Dickson, A. G., 8 Gipps Street, Atawhai, Nelson.7001
ZL2ULJ Campbell, M. H., 136a Parkers Road, Nelson.7001
ZL2ULL Hookham, K. A., 23 Nicholls Road, Halswell, Christchurch.8003
ZL2ULN Bruckel, P., 10 Old Renwick Road, Blenheim.7301
ZL2ULO Lawson, C., 114 Hospital Road, Blenheim.7301
ZL2ULR Burns, A. F., 5 Turners Road, Picton.7372
ZL2ULS Bromley, R. J., 10 Chamboard Place, Nelson.7001
ZL2ULT Taylor, G. R., 163 Waikawa Road, Picton.7372
ZL2ULU Elvy, J. M., 5b Mountain View Road, Blenheim.7301
ZL2ULV Allan, P. D., 20a Courtney Street, Motueka.7161
ZL2ULW Rice, L. J., 67 Wither Road, Blenheim.7301
ZL2ULX Buckton, L., 44 McLauchlan Street, Blenheim.7301

SHIFTING HOUSE?

Remember to advise the following:

AMATEUR LICENCE—
Inform the Radio Inspector at your nearest New Zealand Radio Frequency Management Service Office

***Break-In* DELIVERY—**
Advise the General Secretary, NZART HQ, PO Box 40525, UPPER HUTT, of your new address.
Mention your callsign and membership number.

This advice will be forwarded to the *Call Book* compiler to amend your *Call Book* listing.

ZL3 Callsigns

ZL3AC	Christchurch Branch NZART (Inc.), see Branch Directory
ZL3AD	Donehue, W. R., No. 1 R.D. , Timaru.8621
ZL3AE	Festing, D. A., Main Road, Oxford, North Canterbury.8353
ZL3AF	Ashburton Branch NZART (Inc.), see Branch Directory
ZL3AG	Roberts, G. C., 59 Thomson Street, Ashburton.8300
ZL3AH	Jones, D. L., 53 Wales Street, Halswell, Christchurch.8003
ZL3AI	Fraser, D. J., Glenmark Street, Waipara.8270
ZL3AJ	McDonald, K. R., 44 Inwoods Road, Christchurch.8009
ZL3AK	Sandford, G. G., Flat 3, 44 Peel Street, Geraldine.8751
ZL3AL	Smythe, G. C., 300 Withells Road, Christchurch.8004
ZL3AM	Kirk, R. E., 43 Dover Street, Christchurch.8001
ZL3AN	Duff, B. F., 30 Frensham Crescent, Christchurch.8006
ZL3AO	Bell, M. W., 203 Weston Road, Christchurch.8005
ZL3AP	Whitfield, S. J. N., 48 Hawthornden Road, Avonhead, Christchurch.8004
ZL3AR	Whyte, B. T., 17 Cambridge Street, Ashburton.8300
ZL3AS	Sams, C. G. A., 80 Straven Road, Christchurch.8001
ZL3AT	Mahoney, M. F., 23 Holmwood Road, Christchurch.8001
ZL3AU	Dekker, P., Albany Heights Road, R.D. 2, Albany.1331
ZL3AW	Phillips, M. A., 168 Esplanade, Kaikoura.7351
ZL3AX	Tillman, N. W., 45c Main Road, Redcliffs, Christchurch.8008
ZL3AY	Mason, G. E., Mason's Flat, Hawarden.8274
ZL3AZ	Rayner, D. A., 23 Waitohi Street, Christchurch.8004
ZL3BA	Drumm, B. G., 12 Martin Street, Hamilton.2001
ZL3BB	Gray, G. W., 125 Highcliff Road, Shiel Hill, Dunedin.9001
ZL3BD	Ludwig, M., 105 Beachville Road, Christchurch.8008
ZL3BE	Christchurch Boys' High School Radio Club, (Trustee: ZL3TX), P.O.Box 8157, Riccarton, Christchurch.8034
ZL3BF	Salt, J. S., 6 Leslie Street, Upper Riccarton, Christchurch.8004
ZL3BG	Himing, L. C., 23 Coopers Road, Shirley, Christchurch.8006
ZL3BH	Bowman, G. R. B., 158 Revell Street, Hokitika.7900
ZL3BI	Brice, K. L., 18 College Avenue, Christchurch.8005
ZL3BJ	Hunter, L. C., 42 Stanton Crescent, Christchurch.8002
ZL3BK	Halliburton, G. A., 6 Barlow Street, Christchurch.8004
ZL3BL	Holland, B. N., 75 Blankney Street, Christchurch.8004
ZL3BM	Cook, D., 40 Mays Road, Papanui, Christchurch.8005
ZL3BN	Sim, G. W., 47 Teesdale Street, Christchurch.8005
ZL3BO	King, M. R., 126 Fox Street, Gisborne.3801
ZL3BP	Mountford, T. G., 141a Otipua Road, Timaru.8601
ZL3BQ	Urlwin, A. J. (Mrs), 30 Ryeland Avenue, Christchurch.8004
ZL3BR	White, M. G., Mangawhero Road, P. O. Box 62, Eltham 5.4751
ZL3BS	Tweedie, S. B., 167 Wales Street, Oaklands, Christchurch.8003
ZL3BT	White, E. I., 5 Clementine Lane, Christchurch.8008
ZL3BU	McNeill, E. D., 43b Bowenvale Avenue, Christchurch.8002
ZL3BV	Schaef, L. M., 10 Bridge Street, Greymouth.7801
ZL3BW	Burt, G. L., 114 Marsden Road, Greymouth.7801
ZL3BX	Pattrick, B. L., 1 Kanuku Place, Cashmere, Christchurch.8002
ZL3BY	Halford, B. B., 37 McHardie Street, Wallaceville, Upper Hutt.6401
ZL3BZ	Johnson, C., 10 Harris Street, Pleasant Point.8772
ZL3CA	Sandford, T. W., Unwin Road, Orton R. D. Temuka.8752
ZL3CB	Newton, B. A. (Mrs), 172 Bridle Path Road, Christchurch.8002
ZL3CC	Crosby, K. G., 175 Trevors Road, Ashburton.8300
ZL3CD	Smillie, J. W., 7 Barnes Street, Timaru.8601
ZL3CE	Hewson, J. N., 8 Dunns Avenue, Pines Beach, Kaiapoi.8252
ZL3CF	Lec, C. P., 6 Haycock Avenue, Mt Roskill, Auckland.1004
ZL3CG	Silverwood, K., 12 Banbury Street, Waimangaroa.7650
ZL3CI	Isherwood, B., 134 Park Street, Hokitika.7900
ZL3CK	Seay, M. R., 61 Henry Hill Road, Taupo.3300
ZL3CL	McKay, A. D. G., 2 Cedars Street, Christchurch.8002
ZL3CM	Burrell, K. M., 5 Jacaranda Grove, Maungaraki, Lower Hutt.6301
ZL3CN	Mantell, G. N., 1 Logie Place, Bromley, Christchurch.8006
ZL3CO	Wylie, P. B., 101 Englefield Road, Belfast, Christchurch.8005
ZL3CP	Parton, C. W., St Annes Court, 224 Lincoln Road, Christchurch.8002
ZL3CS	Downer, G. H., Larcombs Road, No. 5 R.D., Christchurch.8021
ZL3CT	Bennett, R. S., 67 Aronui Road, Alexandra.9181
ZL3CU	Moffatt, S. Z., 33 Bidwell Street, Timaru.8601
ZL3CV	Gilligan, M. S. J., 368 Barrington Street, Christchurch.8002
ZL3CX	Emerson, T. C., 8 James Street, Glenfield, Auckland.1310
ZL3CY	Hutchison, D. E., 44 Hawthorndon Road, Christchurch.8004
ZL3CZ	Felmingham, C. E., 3 Gilbert Road, Paroa, Greymouth.7870
ZL3DB	Buschl, B. D., 6/30 Gambia Place, Papanui, Christchurch.8005
ZL3DC	Grindrod, R. J., 5 Macrocarpa Place, Ranui, Auckland.1208
ZL3DD	Mitchell, A. R., 55 Shoreham Street, Blockhouse Bay, Auckland.1207
ZL3DE	Hawes, S. C., Timaru Hospital, Timaru.8630
ZL3DF	Yoeman, J. C., 110 Bristol Street, Christchurch.8001
ZL3DG	Hood, N. D., 47a Aorangi Road, Christchurch.8005
ZL3DH	Hardie, W. S., 245a Harewood Road, Christchurch.8005
ZL3DI	Tylee-Porter, G. J., Crossgates Farm, Cryers Road, Southbridge, R. D. 3, Christchurch.8150
ZL3DJ	Gill, M. E., River Road, Greenpark, R.D. 2, Christchurch.8021
ZL3DK	Walker, D. J., 36 Ardrossan Avenue, Flaxmere, Hastings.4201
ZL3DM	Calvert, R. L., 253a Waimairi Road, Christchurch.8004
ZL3DP	Meikle, B., 24 Abraham Heights, Nelson.7001
ZL3DR	Godfrey, R. J., Main South Road, R. D. 2, Kaikoura.7351
ZL3DS	Brewster, D. W., 860 Avonside Drive, Christchurch.8006
ZL3DT	Searle, G. G., c/- Post Office, Hokitika.7900
ZL3DV	Jefferis, E. W., 15 Kingsgate Place, Christchurch.8005
ZL3DW	Edward, L. N. M., 45d Glenharrow Avenue, Christchurch.8004
ZL3DX	McGee, W. H., 11 Glenavon Place, Christchurch.8004
ZL3DY	Firman, R. K., 181 Morgans Road, Timaru.8601
ZL3DZ	Thomson, G., 2 Naylor Street, Waimate.8791
ZL3FB	Schroeder, W. F., The Vicarage, 8 Roxburgh Street, Christchurch.8002
ZL3FC	Guthrie, M. W., 74 Merivale Lane, Christchurch.8001
ZL3FD	Pollard, J. P. W., 363 Hills Road, Christchurch.8001
ZL3FF	Kelly, I. J. H., 7 Tuirau Place, Ilam, Christchurch.8004
ZL3FH	Francis, C. G., 6 Pratt Street, New Brighton, Christchurch.8009
ZL3FJ	Brown, D. A., 62 Hudson Street, Christchurch.8005
ZL3FK	Hepburn, L. D., 22 Gwynfa Avenue, P. O. Box 1410, Christchurch.8002
ZL3FL	Cox, W. F., 55 Daniels Road, Christchurch.8005
ZL3FM	Campbell, R. J., 3 Shamrock Place, Christchurch.8003
ZL3FN	Wilson, R. J., 11 High Street, Greymouth.7801
ZL3FO	Blackmore, J. H., 364 Riverlaw Terrace, St. Martins, Christchurch.8002
ZL3FP	Kyle, E. A. J., 12a Mountfort Street, Christchurch.8002
ZL3FQ	Hamlin, J. H., 26 Brabourne Street, Christchurch.8002
ZL3FR	Nixon, M. A., 10 Dulles Place, Papanui, Christchurch.8005
ZL3FS	Seed, D. P. (Mrs), 831 Cashmere Road, Halswell, Christchurch.8003
ZL3FT	Clapham, T. S., 31 Ronaldsay Street, Palmerston.9161
ZL3FU	McPhail, T. K., 7 Ostend Place, Christchurch.8004
ZL3FV	McCracken, W. D., 14 Northcote Road, Papanui, Christchurch.8005
ZL3FW	O'Brien, J. R., 508 Marine Parade, Christchurch.8007
ZL3FX	McSherry, O. E., 50 Napier Road, Havelock North, Hawkes Bay.4201
ZL3FY	Gardner, R., 62 Palatine Terrace, Christchurch.8002
ZL3FZ	Fraser, B. H. L., 113 Beresford Street, Christchurch.8007
ZL3GA	Allan, N. J., 11 Longmuir Street, Christchurch.8004
ZL3GB	Cronin, D. W., 86 St. Martins Road, St. Martins, Christchurch.8002
ZL3GC	Baker, D. M., c/- Mr J. McGlashan, P.O.Box 557, Timaru.8600
ZL3GD	Kingan, S. G., c/- Mrs R.M.Hewson, R.D. 8, Anama, Ashburton.8300
ZL3GE	Welford, A. R., 12 Devon Street, Timaru.8601
ZL3GF	Bool, W. A., 145 South Bay Parade, South Bay, Kaikoura.7351
ZL3GH	Mitchell, N. J., 15 Blossomdale Place, Christchurch.8005
ZL3GI	Halliburton, G. J., 6 Barlow Street, Fendalton, Christchurch.8004
ZL3GJ	Reynolds, A. E., 117 Roker Street, Christchurch.8002
ZL3GK	Richardson, T. C. W., 7 Kamahi Place, Paroa, Greymouth.7870
ZL3GL	Philips, R. J., 11 Bencard Place, Christchurch.8002
ZL3GM	Pimm, O. W., 59a Dunbarton Street, Redwood, Christchurch.8005
ZL3GN	Dacombe, A. N., 33a Huntsbury Avenue, Christchurch.800
ZL3GO	Scott, T. R., Ruapuna, No. 5 R.D. , Ashburton.8300
ZL3GP	Middlemiss, P. G., 17 De Bloge Place, Christchurch.8006
ZL3GQ	Watson, P. W., Hamptons Road, R. D. 4, Christchurch.802
ZL3GR	McInnes, D. C., 72 Westgrove Avenue, Christchurch.800
ZL3GS	Wright, G. M., 25 Dunedin Street, Redwood, Christchurch.8005
ZL3GT	Somerville, J. H., 14 Park Lane, Timaru.8601
ZL3GV	Kerdemelidis, T., Flat 1, 421 Worcester Street, Christchurch.8001
ZL3GW	Searle, V., 7 Whitcombe Terrace, Hokitika.7900
ZL3GX	Chapman, A. S., 7 Dellow Place, Christchurch.8002
ZL3GY	Morgan, D. K., 6a Mendip Place, Christchurch.8005

ZL3GZ	Smith, H. E., North Street, Clinton.9251
ZL3HA	Arnold, H. F., 23 Cornwell Street, Christchurch.8001
ZL3HB	Deans, R. H., Tara, Coalgate.8171
ZL3HC	Brittenden, C. E. R., 329 Wainoni Road, Christchurch.8007
ZL3HD	Chambers, D. H., 5 Stiles Place, Dallington, Christchurch.8006
ZL3HE	Harris, J. G., 528 Hagley Avenue, Christchurch.8001
ZL3HG	Davy, K. T., 17 Haddon Street, Timaru.8601
ZL3HH	Wylie, R. L., 21 Vickery Street, Kaiapoi.8252
ZL3HI	Holtum, J. W. A., 18 Brussels Place, Birkenhead, Auckland.1310
ZL3HK	Hayes, W. F., 90 Bright Street, Cobden, Greymouth.7850
ZL3HL	Thompson, S. A., 48 Tosswill Road, Prebbleton.8153
ZL3HM	Evans, C. E., 123 Beach Road, Kaikoura.7351
ZL3HN	Holtum, J. W., 461 Johns Road, Harewood, Christchurch.8005
ZL3HO	Lowry, R. C., 10 Palmers Road, North Beach, Christchurch.8009
ZL3HR	Leitch, A., 113 Beresford Street, Christchurch.8007
ZL3HS	Kempthorne, J. H., 44 Cannon Hill Crescent, Christchurch.8008
ZL3HT	Lyford, A. R., 7 Swansea Road, Stratford.4700
ZL3HU	Sandford, B. D., 9 Verena Place, Green Bay, Auckland.1207
ZL3HV	Fisher, P. J., 152a Brooklands Drive, New Plymouth.4601
ZL3HW	Wallace, C. W., 26 Lynfield Avenue, Christchurch.8004
ZL3HX	Marshall, D. A., 4 Geisha Road, Waikuku, North Canterbury.8250
ZL3HY	Fleming, J. G., 107 Lonsdale Street, Christchurch.8009
ZL3HZ	Southgate, W. A., 7 Paeroa Street, Christchurch.8004
ZL3IA	Tyerman, P. F., 9 Elstow Place, Spreydon, Christchurch.8002
ZL3IB	Walker, J. R. L., 19 Athol Terrace, Christchurch.8004
ZL3IC	McCulloch, E. N., 21 Norwich Street, Christchurch.8006
ZL3ID	Pettigrew, W. L., 148 Peel Street, Westport.7601
ZL3IE	Hopkinson, L. G., 107 Evans Street, Timaru.8601
ZL3IG	Ross, P. J., 4 Oakfield Street, Christchurch.8005
ZL3IH	Preston, W. L., Rhoborough Downs, Lake Pukaki, PB, Fairlie.8771
ZL3II	Serra, K. C., 15 Stapletons Road, Christchurch., P.O. Box 26034, Christchurch.8030
ZL3IJ	Inglis, J. M., 288 Estuary Road, Christchurch.8007
ZL3IL	Wooding, M. G., 374 Ruahine Street, Palmerston North.5301
ZL3IM	Sullivan, J. T., 34 Rollesby Street, Christchurch.8002
ZL3IN	Cox, R., 16 College Avenue, Christchurch.8005
ZL3IO	Crossman, G. D., 2 Wallingford Road, Temuka.8752
ZL3IQ	Drummond, W. P., 11 Reid Crescent, Ashburton.8300
ZL3IR	Benson, A. F., 32 Euston Street, Christchurch.8004
ZL3IS	Soanes, G. A., 245 Westminster Street, Mairehau, Christchurch.8001
ZL3IT	MacDonald, J. D., 42 Buchanan Street, Timaru.8601
ZL3IU	Gray, N. C., Springburn, R.D. 1, Ashburton.8300
ZL3IY	Vickery, K., 139 Raven Street, Kaiapoi.8252
ZL3IZ	Duncan, A., 41a William Street, Richmond.7002
ZL3JA	Avery, J. L., 442 Hills Road, Christchurch.8001
ZL3JB	Nutley, A., c/- Alp Sports, 216 Hereford Street, Christchurch.8001
ZL3JC	Watson, J. P., 12 Forty Street, Timaru.8601
ZL3JD	Van Kuilenberg, P. H., 45 Farrelly Avenue, Mt Roskill, Auckland.1004
ZL3JE	Stewart, D. A., 33 King Street, Pareora.8790
ZL3JF	Henderson, H. P., 35 Hillview Crescent, Timaru.8601
ZL3JG	Rawstorn, G. J., P.O.Box 19-533, Woolston, Christchurch.8030
ZL3JI	Foulds, L. F., 131 Cuthberts Road, Christchurch.8006
ZL3JJ	Crump, M. W., 9 Peraki Street, Kaiapoi.8252
ZL3JK	Williams, H. E., 51 Westholme Street, Christchurch.8005
ZL3JL	McFarlane, A. R., 48 Chalmers Avenue, Ashburton.8300
ZL3JM	Bennett, P. W., Te Araroa, Station Road, Temuka.8752
ZL3JN	Mummery, B. H., 8 McIntyre Street, Shirley, Christchurch.8001
ZL3JO	Papesch, A. J. G. (Dr), 37 Rembrandt Place, Burnside, Christchurch.8005
ZL3JP	Langley, E. W., 8 Cowes Street, Avondale, Christchurch.8007
ZL3JQ	Poll, A. K., 155 Halswell Road, Christchurch.8002
ZL3JR	Kelly, S. J. C., 22a Cascade Place, Christchurch.8008
ZL3JU	Sorensen, A. G., 62 Shortland Street, Christchurch.8006
ZL3JV	MacGeorge, B. A., 9 Opie Street, Waimate.8791
ZL3JX	Rowlands, T. E., "Ruthin", R.D. 2, Kaiapoi.8252
ZL3JY	Stalker, J. P., Greenpark, No. 4 R.M.D., Christchurch.8021
ZL3JZ	Dumbleton, R. S., 30 Koromiko Street, Christchurch.8002
ZL3KA	Macer, J., 31 Colwyn Street, Christchurch.8005
ZL3KC	Cuttriss, S. A., 33 Brabourne Street, Christchurch.8002
ZL3KE	McGrath, R. E., 42 Lyndhurst Crescent, Christchurch.8007
ZL3KG	Willmott, W. R., c/- Willmotts Drapers, 26 Royal Arcade, Timaru.8601
ZL3KI	Jackson, D. W., 4 Creswell Lane, Blenheim.7301
ZL3KJ	Jones, E. V., 155 Derby Street, Westport.7601
ZL3KK	Goodare, T. T., 8 Cutts Road, Christchurch.8004
ZL3KL	Howell, B. C., 6 Deepdale Street, Christchurch.8005
ZL3KM	Woodfield, M. K., 72 Salamanca Road, Sunnynook, Auckland.1310
ZL3KN	Ellis, T. C., Flat 3, 460 Gloucester Street, Christchurch.8001
ZL3KP	Parr, W. E., 30 Cranbrooke Ave, Christchurch.8005
ZL3KQ	Hellyar, G. I., 280 Innes Road, St Albans, Christchurch.8005
ZL3KR	Hughes, A. G., 4 Exton Street, Christchurch.8005
ZL3KS	Downer, M. H., 34 Torquay Place, Christchurch.8005
ZL3KT	Olsson, E. E., 14 Bentley Street, Christchurch.8004
ZL3KU	Waters, K. A., 17 Ormond Road, Napier.4001
ZL3KW	Faass, S. R. F., 13a Miriana Street, Maungatapu, Tauranga.3001
ZL3KX	Harrington, R. J., Mount Harris Road, 9 R.D. , Waimate.8791
ZL3KY	Talbot, A. D., 37 Park View Terrace, Timaru.8601
ZL3KZ	Neilson, J. B., 3 Cadman Street, Runanga, Greymouth.7854
ZL3LA	Ludbrook, S. W., 12 Rawson Street, New Brighton, Christchurch.8009
ZL3LB	Hamilton, W. R., 17 Braithwaite Street, Christchurch.8004
ZL3LC	Corner, P. E., 217 Gloucester Street, Christchurch.8001
ZL3LD	Saunders, B. C., 14 Stackhouse Avenue, Christchurch.8005
ZL3LE	Guard, B. N., 80 Hassall Street, Timaru.8601
ZL3LF	Baynham, B. F., Pyle Road West, One Tree Point, R.D. 1, Ruakaka.0253
ZL3LG	Jackson, C. J., 74 Cambridge Street, Ashburton.8300
ZL3LH	Muir, D. N., 6 Oriana Place, Palmerston North.5301
ZL3LI	Neal, J. V., c/- Officers Mess, RNZAF Base Ohakea, Private Bag, Palmerston North.5450
ZL3LK	McGowan, J. S., 2 Rhodesvale Terrace, Christchurch.8002
ZL3LL	Leadley, J. M., "Woodlands", R. D. 7, Ashburton.8300
ZL3LM	Burrell, N. W., 209 Ilam Road, Christchurch.8004
ZL3LN	Penney, V. J., 16 Dorrett Place, Christchurch.8002
ZL3LO	Cairns, A., 42 Santa Maria Avenue, Christchurch.8008
ZL3LP	Brown, H. P., 8 Neill Street, Hornby, Christchurch.8004
ZL3LQ	Paltridge, K. K., 131 Warrington Street, Christchurch.8001
ZL3LS	Miller, G. C., 30 Nirvana Street, Brooklands, Christchurch.8009
ZL3LT	Stanbury, A. C., 43 Dunedin Street, Redwood, Christchurch.8005
ZL3LU	Campbell, G. R., 24 Rosamund Place, Christchurch.8003
ZL3LV	Davey, R. L., 24 Hartford Street, Christchurch.8005
ZL3LX	Kirkpatrick, I. J., 99 Bickerton Street, Christchurch.8006
ZL3LY	Eddington, J. A., 23 Ferner Street, Christchurch.8006
ZL3LZ	Dale, A. J. E., 25 Tancred Street, Christchurch.8001
ZL3MA	Kingswell, G. N., "Highlands", P. O. Box 93, Geraldine.8751
ZL3MB	Wilson, M. J. G., 23 Vauxhall Street, Bishopdale, Christchurch.8005
ZL3MC	McKenzie, D. S., 47 Kotare Street, Fendalton, Christchurch.8004
ZL3MD	Millyard, A. M., 150 Wainoni Road, Christchurch.8006
ZL3ME	Bramley, C. J., 7 Edward Street, Prebbleton.8153
ZL3MF	Oates, D. J., Carters Beach, c/- P. O. Box 20, Westport.7600
ZL3MG	Urlwin, R. A., 30 Ryeland Avenue, Burnside, Christchurch.8004
ZL3MH	Macer, D. R. J., 31 Colwyn Street, Christchurch.8005
ZL3MI	Sullivan, R. E., 103a Jeffreys Road, Bryndwr, Christchurch.8005
ZL3MJ	Lewis, C. T., 30 Te Rama Place, Christchurch.8006
ZL3MK	Phillips, A. S., 148 Brookside Terrace, Bryndwr, Christchurch.8005
ZL3ML	McNicol, A. D., 26 Gainford Street, Christchurch.8004
ZL3MM	Hills, R. I., 25 Rapaki Road, Christchurch.8002
ZL3MN	Gibson, E. N., 52 Rimu Street, Timaru.8601
ZL3MO	Cole, W. R., Grange Settlement Road, Temuka.8752
ZL3MQ	McMaster, R. J., 8 Greens Road, Kaiapoi R. D. 1.8252
ZL3MR	Warner, J. A., 11 Goulds Road, Timaru.8601
ZL3MS	Brash, J. P., 14 Rydal Street, Christchurch.8002
ZL3MT	Thompson, M. C., R.D. 1, Westport.7621
ZL3MU	Henshall, E. H. (Mrs), 281 Innes Road, Christchurch.8005
ZL3MV	Morrin, E. C., 45 Wychbury Street, Spreydon, Christchurch.8002
ZL3MY	Searle, R. W., 7 Whitcombe Terrace, Hokitika.7900
ZL3MZ	Garlick, P. R., 23 Lydia Street, Greymouth.7801
ZL3NA	Robinson, D. G., Kowhitirangi, R.D. , Hokitika.7900
ZL3NB	Swann, A., 29 Manor Place, Bryndwr, Christchurch.8005
ZL3NC	Ingram, R. C., Morpeth Street, Rapahoe, Greymouth.7800
ZL3ND	Liddell, C. G., 356 Avonside Drive, Christchurch.8006
ZL3NE	Gyde, R. M., 26 Anita Avenue, Mt. Roskill, Auckland.1004
ZL3NG	McVicar, J. J., Razorback Road, Bombay, Auckland.1750

ZL3NH	Rogers, P. J., Corner Cashmere and Happy Home Roads, Christchurch.8003
ZL3NI	Walker, D. N., 46 Hamilton Street, Temuka.8752
ZL3NJ	Rumens, E. A., 51a Wainoni Road, Christchurch.8006
ZL3NL	Tait, A. Mc M., 8 Ashbourne Street, Christchurch.8005
ZL3NM	Young, R. S., Anarewa Crescent, Stephens Bay, Motueka.7161
ZL3NO	Johannis, K. L., 6 Pittville Street, No. 2 R.D. , Rangiora.8254
ZL3NP	Johnstone, G. V. O., 19 Main South Road, Upper Riccarton, Christchurch.8004
ZL3NQ	Drever, G. R., 139 Belt Road, Ashburton.8300
ZL3NR	Campbell, L. S., 83 Farrington Avenue, Christchurch.8005
ZL3NS	Ositis, T., 128 Brookside Terrace, Christchurch.8005
ZL3NT	Blackwell, G. C., 3 Dobson Street, Christchurch.8002
ZL3NU	Collett, L. M., 263 Cannon Hill Crescent, Christchurch.8008
ZL3NV	O'Connor, E. P., 6 Stephens Street, Rangiora.8254
ZL3NW	MacIntosh, R. M., Main North Road, R.D. 1, Kaiapoi.8252
ZL3NY	Stapley, G. P., 220 Opawa Road, Christchurch.8002
ZL3OA	MacDonald, B. A., 221 Middle Road, Ashburton.8300
ZL3OC	Horne, R. C., 115 Blackett Street, Rangiora.8254
ZL3OD	Barnes, G. J., 70 Thompson Street, Cambridge.2351
ZL3OE	Richards, D. L., 38 Frankleigh Street, Christchurch.8002
ZL3OF	Milne, I. F., 143 Sparks Road, Christchurch.8002
ZL3OG	Sandford, C. J., 38 St. Albans Avenue, Mt Eden, Auckland.1003
ZL3OH	Knoef, F. J. C., 54 Harbour Road, Christchurch.8009
ZL3OI	Godfrey, K. E., 3 Wycola Avenue, Hei Hei, Christchurch.8004
ZL3OJ	Digby, N. M., 4 Norfolk Street, Christchurch.8005
ZL3OK	Lark, M. J., Motueka Quay, Motueka.7161
ZL3ON	Nicholls, J. B., 3 Cliff Street, Christchurch.8008
ZL3OP	Prebble, N. W., 134 Waimairi Road, Ilam, Christchurch.8004
ZL3OQ	Sorensen, E. A., 37 Hendon Street, St. Albans, Christchurch.8001
ZL3OU	Bellamore, A. H., 87 Radley Street, Christchurch.8002
ZL3OV	Scrivener, E. H., Flax Cottage, Main North Road, Waikuku.8250
ZL3OW	Coman, H. O., 24 Digby Place, Christchurch.8006
ZL3OX	Mitchell, C. J., 58a Hackthorne Road, Cashmere, Christchurch.8002
ZL3OY	Coull, G., 45 Seven Oaks Drive, Christchurch.8005
ZL3OZ	Burberry, R. L., 25 Percival Street, Beckenham, Christchurch.8002
ZL3PA	Jenner, D. J., 62 Pembroke Road, Northland, Wellington.6005
ZL3PB	Lobb, G. W., 62a Peel Street, Westport.7601
ZL3PD	Pluck, R. L., Forbes Road, Tai Tapu.8150
ZL3PE	Carruthers, J. E., 80 Gilberthorpes Road, Hornby, Christchurch.8004
ZL3PF	Asher, A. S., 143b Memorial Avenue, Christchurch.8005
ZL3PH	Rowe, B., 250 Grahams Road, Burnside, Christchurch.8005
ZL3PI	Bartrum, B. R., 31b Bowenvale Avenue, Cashmere, Christchurch.8002
ZL3PJ	Grewar, M. A., "Rimu" Westland.7954
ZL3PL	Lobb, R. E. (Mrs), 62a Peel Street, Westport.7601
ZL3PM	McGee, P. D., 1 Craigieburn Street, Darfield.8172
ZL3PN	Boorer, G. F., 48a Newton Street, Timaru.8601
ZL3PO	Turner, D. K., 39 Dillons Point Road, Blenheim.7301
ZL3PQ	Were, D. A., 97 Campbell Road, Onehunga, Auckland.1106
ZL3PR	Petersen, C. M., 24 Derby Street, Westport.7601
ZL3PS	Davidson, F. W., 25 Sledmere Street, Bryndwr, Christchurch.8005
ZL3PT	Douglas, J. C. (Miss), "Giggleswick", Seymour Street, Millerton.7650
ZL3PV	Walker, W., Springston. 8150
ZL3PX	Chapman, G. A., 8 Boys Place, Christchurch.8001
ZL3PZ	Jackson, W. B., 42 Churchill Street, Kaikoura.7351
ZL3QB	McGlashan, D. C., 501b Ilam Road, Christchurch.8005
ZL3QC	Mullis, N. A., 104 Mooray Avenue, Bishopdale, Christchurch.8005
ZL3QD	Clark, E. R., 5 Chedworth Avenue, Christchurch.8005
ZL3QE	Browne, E. M. J., 9 Sarsfield Street, Southbridge.8150
ZL3QF	Cotton, M., 145 Raven Street, Kaiapoi.8252
ZL3QG	Ross, G. L., 255 Cannon Hill Crescent, Christchurch.8008
ZL3QH	Stanton, K. A., 7 Rutherglen Avenue, P. O. Box 31095, Christchurch.8030
ZL3QI	Wornall, C. J., 5 Menlo Terrace, St. Andrews Hill, Christchurch.8008
ZL3QJ	Havord, P. R., 16 Worsleys Road, Christchurch.8002
ZL3QK	Dawson, R., 41 Garlands Road, Christchurch.8002
ZL3QL	Carrell, T. D., 33 Ryeland Avenue, Christchurch.8004
ZL3QN	Barber, F. E., 20 Lomax Place, Christchurch.8004
ZL3QO	Allan, J. M., 4 Highfield Lane, Rangiora.8254
ZL3QP	Spencer, R. D., Weedons Ross Road, R.D. 6, West Melton, Christchurch.8021
ZL3QQ	Seed, T. J., 831 Cashmere Road, Halswell, Christchurch.8003
ZL3QR	Gillman, G. H., 120 Highway 72, Woodend.8255
ZL3QT	Delis, J. B. G., 455a Johns Road, Harewood, Christchurch.8005
ZL3QU	Borrell, R. P., 93 Chapter Street, Christchurch.8005
ZL3QV	Smith, R. H., 76 Santa Maria Avenue, Christchurch.8008
ZL3QW	Betteridge, O. J., 8 Chambers Street, Napier.4001
ZL3QX	Mayo, G. J. L., 9 Westenra Terrace, Christchurch.8002
ZL3QY	Belcher, E. W., 1 Hall Street, Cobden, Greymouth.7850
ZL3QZ	Daniels, F. J. H., Ngakawau, via Westport.7650
ZL3RA	Riach, C. D., 25 Buffon Street, Waltham, Christchurch.8002
ZL3RB	Davis, A. W., Aylesbury Road, No. 1 R.D., Christchurch.8021
ZL3RC	Signal, C. B., 8 Bridge Street, Temuka.8752
ZL3RD	Davey, D. R., 7 Westview Crescent, West Melton, R.D. 6, Christchurch.8021
ZL3RE	Bott, R. A., 404 Cashmere Road, Christchurch.8002
ZL3RF	Dickey, C. N., 20 Todd Avenue, Christchurch.8005
ZL3RH	Pumpa, P. G., 21 Atiamuri Village, R.D. 1, Atiamuri.3291
ZL3RI	Hughes, J. O., 82 Hall Street, Cobden, Greymouth.7850
ZL3RJ	Hutton, B. G., 15 Galway Avenue, Christchurch.8005
ZL3RK	McKenzie, T. J., 73 Cygnet Street, North New Brighton, Christchurch.8009
ZL3RL	Tunnicliffe, D. N., 3/24 Marriner Street, Sumner, Christchurch.8008
ZL3RN	Yeates, D. R., 69 St. Andrews Hill Road, St. Andrews Hill, Christchurch.8008
ZL3RO	Walsh, G. J., 30 Howarth Road, Fairfield.9006
ZL3RP	Nobbs, R. L., 22 Shand Crescent, Riccarton, Christchurch.8004
ZL3RQ	Riordan, G. B., 25a Taylors Avenue, Christchurch.8005
ZL3RR	North Canterbury Amateur Radio Club, see Branch Directory
ZL3RS	Campbell, D., 78 Cotswold Avenue, Bishopdale, Christchurch.8005
ZL3RT	Rayner, L. A., 693/2 Fairview Road, Te Awamutu.2400
ZL3RU	Bennett, R. G. T., 60 Kirkwood Avenue, Christchurch.8004
ZL3RV	Rigg, I. K., 50 St. John Street, Christchurch.8006
ZL3RW	MacKay, D. J., 22 Waipara Street, Christchurch.8002
ZL3RY	Clark, E. J., 5 Albert Terrace, Christchurch.8002
ZL3RZ	King, S. P., 12 Nayland Street, Christchurch.8008
ZL3SA	Gibbs, R. A., 11 Pandora Street, Christchurch.8009
ZL3SB	Riordan, A. A. C., 95 Crofton Road, Harewood, Christchurch.8005
ZL3SC	Shearman, G. D., 68 Proctor Street, Christchurch.8005
ZL3SD	Powell, M. B., 1/23 Kent Lodge Avenue, Avonhead, Christchurch.8004
ZL3SE	Harvey, M. A., 4 Coster Street, Wakatu, Nelson.7001
ZL3SF	Maloney, J. N., 31 Middlepark Road, Christchurch.8004
ZL3SG	Harbeck, A. D., 28 Martbern Crescent, Christchurch.8005
ZL3SI	Little, G. W., 81A Banks Avenue, Christchurch.8006
ZL3SJ	Fraser, G. J., 206 Major Hornbrook Road, Christchurch.800
ZL3SK	Pattrick, T. L., 46 Sherborne Street, Christchurch.8001
ZL3SL	Leeming, D. S., 92 Clyde Road, Fendalton, Christchurch.8004
ZL3SM	Graham, B. N., 90 Churchill Street, Kaikoura.7351
ZL3SN	Oldham, J. E., 40 Russell Street, Westport.7601
ZL3SO	Kilkolly, J. W., Haselden Street, Westport.7601
ZL3SP	Brookman, P. J., 361 Gardiners Road, Christchurch.8005
ZL3SQ	Hadfield, A. I., 2/284 Manchester Street, Christchurch.8001
ZL3SR	Webster, R. D., 2a Nihill Crescent, Mission Bay, Auckland.1105
ZL3SS	Langrish, T. F., 36 Bowenvale Avenue, Christchurch.8002
ZL3ST	Williams, K. E., 185 Greers Road, Christchurch.8005
ZL3SU	Orchard, P. J., 15 Palmerston Street, Greymouth.7801
ZL3SV	Watson, G. L., P. O. Box 262, Motueka.7161
ZL3SW	Carter, D. R., Mt. Gay, Pleasant Point.8772
ZL3SY	Thomas, P. A., 270 Centaurus Road, Christchurch.8002
ZL3SZ	Dalrymple, D. L., 65 Frankleigh Street, Christchurch.8002
ZL3TA	Ritchie, M. V. H., 11 Hands Road, Hillmorton, Christchurch.8002
ZL3TC	Smith, T. M. (Mrs), North Street, Clinton.9251
ZL3TD	Daly, P. P., 117 Emmett Street, Shirley, Christchurch.800
ZL3TE	Turner, J. N., 2/202a Main Road, Redcliffs, Christchurch.8008
ZL3TF	Isles, P. R., 50 Woodville Street, St. Albans, Christchurch.8001
ZL3TG	Copland, G. M., 11 Peel Street, Christchurch.8005
ZL3TH	Gould, P. N., No. 10 R.D. , Waimate.8791
ZL3TI	Button, B. H., 86 Lake Terrace Road, Burwood, Christchurch.8006
ZL3TJ	Currie, W. J., 31 Haselden Street, Westport.7601

ZL3TK	Martin, D. F., 28 High Street, Greymouth.7801
ZL3TL	Paterson, M. S., 120 Hastings Street, Christchurch.8002
ZL3TM	Buchanan, W. A., 24 Dowling Road, Paroa, Greymouth.7870
ZL3TN	Dowling, D. W., Fairview, R. D. 2, Timaru.8621
ZL3TP	MacLean, A. G., 9 Horton Street, Pleasant Point.8772
ZL3TR	Haynes, J. C., 26 Roosevelt Avenue, Christchurch.8001
ZL3TS	Smith, A. E., 23 Deloraine Street, Christchurch.8002
ZL3TT	Symes, A. C. O., 5 Gilwell Street, Christchurch.8006
ZL3TU	Sharnock, M. A., 6 Ashby Place, Christchurch.8005
ZL3TV	Ching, W. M., 47 Leeston Street, Ashburton.8300
ZL3TW	Riley, T. R., 20 Rearsby Drive, Halswell, Christchurch.8003
ZL3TX	Strong, W. S., 20e Hackthorne Road, Christchurch.8002
ZL3TY	McQuarrie, R. J., Weenink Road, Greymouth.7801
ZL3TZ	Rio, N. N., see ZL7TZ.
ZL3UA	Mulholland, F. S. T., 4 Bramwell Street, Dallington, Christchurch.8006
ZL3UB	Stevenson, H. H., 16 Wilsons Road, Christchurch.8002
ZL3UC	Eden, G. C., 41 Neville Street, Christchurch.8002
ZL3UD	Smart, L. E., 48 Leslie Street, Waitara.4656
ZL3UE	Prattley, R. H., Ellesmere Road, R. D. 2, Christchurch.8021
ZL3UF	Prue, B. O., 111 Union Street, New Brighton, Christchurch.8007
ZL3UG	Lewis, G. H., 361 Karori Road, Karori, Wellington.6005
ZL3UI	Meredith, F. P. R., 63 Harrow Street, Christchurch.8001
ZL3UK	Julian, T. D., 16 Dormer Street, Christchurch.8005
ZL3UL	Smith, A. F., 39 Wesley Street, Kaiapoi.8252
ZL3UN	Marshall, A. J., No. 7 R.D. , Ashburton.8300
ZL3UP	McNicholl, M. W., 4 Corfe Street, Christchurch.8004
ZL3UQ	Black, A. W., 48 Checketts Avenue, Halswell, Christchurch.8003
ZL3UR	South Canterbury NZART (Inc.), see Branch Directory
ZL3US	Smith, P. G., 3 Blakiston Street, Christchurch.8002
ZL3UT	Hartley, D., 23 Wellington Street, Linwood, Christchurch.8001
ZL3UU	Gordon, M., 3 Rydal Street, Christchurch.8002
ZL3UV	Coles, L. F., 232 Shortland Street, Christchurch.8006
ZL3UW	Conroy, H., 51 Bellbrook Crescent, Shirley, Christchurch.8001
ZL3UX	Vincent, L. L., Lismore, R. D. 5, Ashburton.8300
ZL3UY	Brown, A. G., 355 Pine Avenue, South Brighton, Christchurch.8007
ZL3UZ	McKenzie, C. D., 17 Hulverstone Drive, Christchurch.8007
ZL3VA	Williams, D. T., 13 Liggins Street, Christchurch.8006
ZL3VB	Winter, D., 8 Baretta Street, Christchurch.8002
ZL3VG	Burling-Claridge, J. A., 4 Coventry Street, Christchurch.8001
ZL3VH	Roozen, A. C. M., P. O. Box 80, 40 Forbes Road, Tai Tapu.8150
ZL3VI	Melhuish, B. J., 34 St Andrews Hill Road, Christchurch.8008
ZL3VJ	MacGeorge, A. A. G., 10 Manurere Street, Christchurch.8004
ZL3VK	Lawrence, J. E., 25 Andrew Street, Timaru.8601
ZL3VM	Wilson, D. W. T., Seafield, No. 7 R. D., Ashburton.8300
ZL3VN	Bradley, J. N., 169 Weston Road, Christchurch.8005
ZL3VO	Elder, J., 30 Maling Street, Christchurch.8006
ZL3VP	Bradshaw, G. J., 159 Ashgrove Terrace, Christchurch.8002
ZL3VR	McMaster, A. S. (Mrs), Greens Road, R.D. 1, Kaiapoi.8252
ZL3VS	Uden, B. G., Selwyn Lakes Road, Irwell, R.D. 3, Christchurch.8021
ZL3VT	Vasta, A. I., 13 Kaka Road, South Bay, Kaikoura.7351
ZL3VU	Hayes, R. S., 7 Flannery Street, Leeston.8151
ZL3VV	Christchurch West Amateur Radio Club, see Branch Directory
ZL3VW	Winskill, I. E., Caverhill, No. 1 R.D. , Cheviot.8271
ZL3VX	Parry, R. I., 18 Sunvale Terrace, Christchurch.8002
ZL3VY	Dixon, A. P., 16 Kildare Terrace, Lincoln.8152
ZL3VZ	Paterson, A. J., 52 Cavendish Road, Christchurch.8005
ZL3WC	Reeves, N. J., 10 North Street, Motueka.7161
ZL3WD	Gilbert, G. R., 3 Lyttelton Street, Lincoln.8152
ZL3WE	Longson, H. J. O., 21 Kinnaird Place, Christchurch.8002
ZL3WF	Wade, D. L., 8 Sabys Road, Halswell, Christchurch.8003
ZL3WG	Baird, J. F., 11 Aynsley Terrace, Christchurch.8002
ZL3WH	St. Andrews College Radio Club, (Trustee: ZL3RJ), Papanui Road, Christchurch.8005
ZL3WI	Wilkinson, J. F., Le Bons Bay, R.D. , Akaroa.8161
ZL3WJ	Young, W. H., 74a Innes Road, Christchurch.8005
ZL3WK	Martin, E. (Mrs), 867 Ferry Road, Woolston, Christchurch.8002
ZL3WL	O'Connell, G. E., 31 Murray Street, Greymouth.7801
ZL3WM	Oliver, J. A., Main Road, Tai Tapu.8150
ZL3WN	Askey, G., 106 North Avon Road, Christchurch.8001
ZL3WO	Welsh, L. D., 18 Woodlands Place, Christchurch.8007
ZL3WQ	Mackey, C. J., 1 Camp Street, Ahaura.7850
ZL3WR	Martin, V. E., 867 Ferry Road, Woolston, Christchurch.8002
ZL3WS	Tombling, F., 20 Derwent Street, Christchurch.8005
ZL3WT	Duncan, M. W., 37 Mountfort Street, Christchurch.8002
ZL3WU	Wright, A. F., 65 Ludstone Road, Kaikoura.7351
ZL3WV	Rigby, F., Ellesmere Junction, Springston, R.D. 4.8021
ZL3WX	Smillie, B., 19 Greenfield Place, Christchurch.8005
ZL3WY	Yeates, J. M. (Mrs), 69 St. Andrews Hill Road, St. Andrews Hill, Christchurch.8008
ZL3WZ	Lewitt, D. W., Miners Arms Road, Old West Coast Road, R.D. 6, Christchurch.8021
ZL3AAA	Garlick, R. A., 23 Lydia Street, Greymouth.7801
ZL3AAB	Garlick, Z. H. (Mrs), 23 Lydia Street, Greymouth.7801
ZL3AAC	Atkinson, H. R., 98 Condell Avenue, Papanui, Christchurch.8005
ZL3AAD	Alderson, G. E., 7 Priors Road, R. D. 1, Rangiora.8254
ZL3AAF	Crichton, R. J. C., 98 Estuary Road, Christchurch.8007
ZL3AAG	Batterbury, C., 4 Chedworth Avenue, Bishopdale, Christchurch.8005
ZL3AAH	O'Brien, W. M., 255 Estuary Road, Christchurch.8007
ZL3AAI	Grey, G. R., 89 Walters Road, Christchurch.8005
ZL3AAK	Wathne, S. R., 487 Greers Road, Papanui, Christchurch.8005
ZL3AAL	Vincent, R. K., 1 Hartley Place, Palmerston North.5301
ZL3AAN	Colville, L. M., 115 Cameron Street, Ashburton.8300
ZL3AAO	Ballantyne, S. T., 9 Wilsons Road, St. Martins, Christchurch.8002
ZL3AAQ	Banks, L. F., Buller Gorge, P. B. Westport.7620
ZL3AAR	Adams, P. H. L., 7 Alexander Terrace, Greymouth.7801
ZL3AAS	Silke, A. J., 61a Cheyenne Street, Upper Riccarton, Christchurch.8004
ZL3AAT	van Waelsden, F. H. A. M., 208 Grimseys Road, Christchurch.8005
ZL3AAU	Miller, J. G., 30 Fairford Street, Christchurch.8005
ZL3AAV	Hart, L. J. W., 61 Wakefield Street, Westport.7601
ZL3AAW	Simpson, W., 43 Alport Road, Christchurch.8006
ZL3AAY	Bowie, A. F. S., 10 Claremont Avenue, Christchurch.8005
ZL3AAZ	Allan, L. L.(Mrs), 4 Highfield Lane, Rangiora.8254
ZL3ABA	Allan, S. L., 4 Highfield Lane, Rangiora, North Canterbury.8254
ZL3ABB	McKay, D. J., 55 Wingate Street, Christchurch.8005
ZL3ABC	Hooker, R. O., 272 Wainoni Road, Christchurch.8007
ZL3ABD	Hancock, C. W. I., 17 Mafeking Street, Christchurch.8007
ZL3ABE	Roberts, B. M., 135 Russell Street, Westport.7601
ZL3ABF	Webbink, J. H., 11 Wattle Drive, North New Brighton, Christchurch.8009
ZL3ABH	Middlemiss, I. R., 427 Linwood Avenue, Christchurch.8006
ZL3ABJ	Jensen, B. D., 21 Colwyn Street, Christchurch.8005
ZL3ABK	Keen, R. A., 36 Lindsay Street, Timaru.8601
ZL3ABL	Brookes, I. A., 34 Allnatt Street, Temuka.8752
ZL3ABM	Graham, D., Manukau Central Caravan Park, 902 Great South Road, Manukau City.1701
ZL3ABN	Lawry, D. W., Emerson Crescent, Church Bay, Banks Peninsula.8012
ZL3ABO	Glass, B. L., 31 View Road, Campbells Bay, Auckland.1310
ZL3ABP	Snushall, J. G., Beach Road, Kaikoura.7351
ZL3ABQ	Bailey, K. W., 5 Wilson Street, Renwick, Blenheim.7301
ZL3ABR	Harris, G. T., 194 Hawthornden Road, Christchurch.8004
ZL3ABS	Smith, G. B., 39 Roberta Drive, Christchurch.8002
ZL3ABU	Strachan, I. S., 22 Rowses Road, Christchurch.8007
ZL3ABV	Jackson, P., 64 McQueens Road, Cheviot.8271
ZL3ABW	Maunder, H. B., 23 Buchanans Road, Christchurch.8004
ZL3ABY	O'Sullivan, K. D., 53 Marlborough Street, Greymouth.7801
ZL3ACB	Mollison, G. W. P., 11 Goya Place, Christchurch.8005
ZL3ACC	Chambers, C. H., 21 De Ville Place, Christchurch.8006
ZL3ACD	Batchelor, G. W., 41 Kirkwood Avenue, Christchurch.8004
ZL3ACE	Dodgshun, J. C., 10 Devonport Lane, Christchurch.8001
ZL3ACF	Richardson, J. T., 3 Monowai Crescent, Christchurch.8009
ZL3ACG	Heyward, K. W., 46 Yellowstone Crescent, Christchurch.8009
ZL3ACH	White, D. J., 7 R.D. , Waimate.8791
ZL3ACJ	Parker, T. L., 4 Margot Lane, Christchurch.8008
ZL3ACK	Leeming, N. V., 17 Heaton Rhodes Place, Christchurch.8002
ZL3ACL	Bidlake, R. P., 72a Canada Street, Timaru.8601
ZL3ACM	Zampese, M. J. (Mrs), 26 Olwyn Terrace, Frankton, Hamilton.2001
ZL3ACN	Honey, R. M., 167 Brittan Street, Hokitika.7900
ZL3ACP	Van Slooten, F., 16 Greenhurst Street, Sockburn, Christchurch.8004
ZL3ACR	Chapman, A. R. B., 35 Proctor Street, Christchurch.8005
ZL3ACS	Borgfeldt, C. D., 37 Blankney Street, Hornby, Christchurch.8004
ZL3ACT	Patten, G. J., 435 Lower Styx Road, Christchurch.8009
ZL3ACU	McKay, B., 23 Palmside Street, Christchurch.8002

ZL3ACV	Hickman, K. A., 5 Cotswold Avenue, Christchurch.8005
ZL3ACW	Crawford, W. E. H., 3 Melville Street, Christchurch.8005
ZL3ACX	Robbins, K. F., 83 Springfield Road, St. Albans, Christchurch.8001
ZL3ACZ	Ingram, R. T., 80 Romily Street, Westport.7601
ZL3ADA	Bell, R. W., 32 Flower Street, Christchurch.8005
ZL3ADB	Crase, G. E., 63 Wakefield Street, Westport.7601
ZL3ADC	Lintott, N., 49 Jocelyn Street, Christchurch.8005
ZL3ADE	Ayre, G., RNZAF Station, Wigram, Christchurch.8004
ZL3ADF	Hirtzel, J. E., 451 Greers Road, Christchurch.8005
ZL3ADG	Burnside High School Radio Club, (Trustee ZL3TQH), Greers Road, Christchurch.8005
ZL3ADH	Boote, R. J., 8 Hinton Road, Karoro, Greymouth.7870
ZL3ADI	Ingram, A. W. W., 60 Nortons Road, Christchurch.8004
ZL3ADJ	Jennings, L. W., 5 Ilex Place, Kaiapoi.8252
ZL3ADK	Fitzgerald, K. P., 24 Mathers Road, Christchurch.8002
ZL3ADL	Wise, R. A., 36 Springs Road, Sockburn, Christchurch.8004
ZL3ADN	Dykes, G., 3 Fraser Place, Rangiora.8254
ZL3ADO	Dolamore, C. J., 59a Dunbarton Street, Redwood, Christchurch.8005
ZL3ADP	MacDonald, D. C., 221 Middle Road, Ashburton.8300
ZL3ADQ	Hamilton, J. C., 12 Updale Place, Christchurch.8003
ZL3ADR	Pritchard, B. D., 120 West Belt, Rangiora.8254
ZL3ADS	Squire, D. D., Waitohi, Temuka.8752
ZL3ADT	Johnson, R. D., 189 Queensbury Street, Christchurch.8006
ZL3ADU	Van der Knapp, H., 92 Halswell Junction Road, Christchurch.8003
ZL3ADV	Phillips, R. W., 31 Appleby Crescent, Christchurch.8005
ZL3ADW	Phillips, H. J. (Mrs), 31 Appleby Crescent, Christchurch.8005
ZL3ADX	Carney, W. J., 164 Pacific Road, Christchurch.8009
ZL3ADZ	Wignall, T. J. S., 2/43 McLean Street, Linwood, Christchurch.8006
ZL3AFA	Kelly, C. W. B., 34 Liverton Crescent, Christchurch.8005
ZL3AFB	Stirling, K. W., 127 Trevors Road, Ashburton.8300
ZL3AFC	Simpson, P. R., 168c Monks Spur Road, Redcliffs, Christchurch.8008
ZL3AFD	Haberecht, D. C., 272 Wainoni Road, Christchurch.8007
ZL3AFE	Zampese, L., 26 Olwyn Terrace, Frankton, Hamilton.2001
ZL3AFF	O'Brien, C. M., 255 Estuary Road, Christchurch.8007
ZL3AFG	Wylks, W. G., c/-Dr T. J. Seed, 831 Cashmere Road, Halswell, Christchurch.8003
ZL3AFH	Latham, W. I., 168 Mackenzie Avenue, Opawa, Christchurch.8002
ZL3AFJ	Stone, W., 69 Mary Street, Papanui, Christchurch.8005
ZL3AFN	Griffiths, J. P., 105 Brougham Street, Westport.7601
ZL3AFO	Christensen, P. J., 123 Forfar Street, Mornington, Dunedin.9001
ZL3AFP	Smith, D. L., 53 Farquhars Road, Redwood, Christchurch.8005
ZL3AFQ	Duxbury, I. N., 99 Maidstone Road, Christchurch.8004
ZL3AFR	Burke, J. P., 246 Main North Road, Redwood, Christchurch.8005
ZL3AFS	Pearcy, E. A., 239 Condell Avenue, Papanui, Christchurch.8005
ZL3AFT	Williamson, C. N., St. John of God Hospital, Nash Road, Halswell, Christchurch.8003
ZL3AFV	Henden, J. R., 221 Innes Road, St. Albans, Christchurch.8005
ZL3AFW	Wilson, W. E., 232 Coast Road, Wainuiomata.6305
ZL3AFX	Morrin, M. E., 45 Wychbury Street, Spreydon, Christchurch.8002
ZL3AFZ	Hall, C. L., 20 Sumner Street, Spreydon, Christchurch.8002
ZL3AGA	Bolland, N., 12 Brent Place, Christchurch.8005
ZL3AGB	Barrett, T., 47 Arnold Street, Sumner, Christchurch.8008
ZL3AGD	Holland, A. D., 5 Rose Street, Ranui Heights, Porirua.6201
ZL3AGE	Holland, J. A. (Mrs), 5 Rose Street, Ranui Heights, Porirua.6201
ZL3AGF	Blanchard, J. S., 9 Farrington Avenue, Bishopdale, Christchurch.8005
ZL3AGG	Pope, G. C., R.D. 3, Timaru.8621
ZL3AGH	Banks, J., 418 Greers Road, Christchurch.8005
ZL3AGI	Leys, T., 46 Waratah Street, Christchurch.8007
ZL3AGJ	Whitlow, T. J., 45 Geddis Street, Rangiora.8254
ZL3AGK	Lucas, T. H., 8 Willryan Avenue, Christchurch.8009
ZL3AGL	Sinclair, S., 54 Withells Road, Avonhead, Christchurch.8004
ZL3AGM	Jackson, B. A., 42 Churchill Street, Kaikoura.7351
ZL3AGN	Vuleta, M. S., 19 Aviemore Street, Timaru.8601
ZL3AGO	McManus, T. C., Maungati, R. D. 2, Timaru.8621
ZL3AGP	Thomson, G. G., 10 Hanrahan Street, Christchurch.8004
ZL3AGQ	Harris, D. W., 67 Ayers Street, Rangiora.8254
ZL3AGR	McCallister, C. R., 6 Waimarama Street, Waikawa Bay, Picton.7372
ZL3AGS	Lovell, J. D., 41 Yardley Street, Avonhead, Christchurch.8004
ZL3AGT	Foster, I. M., Cronadun, R.D. 1, Reefton.7853
ZL3AGX	McCutcheon, R. B. W., Silverstream Courts, 13/234 Colombo Street, Christchurch.8002
ZL3AGY	Moyle, J. R., 68 Clyde Road, Christchurch.8004
ZL3AHK	Cudby, K. B., 21 Stapletons Road, Christchurch.8001
ZL3AHL	Lyon, K. W., 401 Greers Road, Christchurch.8005
ZL3AHM	Dineen, R. T., 82 Greenpark Street, Christchurch.8002
ZL3AHN	Whitley, W. G., 13 Heyders Road, Christchurch.8009
ZL3AHO	Reed, B. S., 9 Smith Street, Kaiapoi.8252
ZL3AHP	Payne, A. T., 9 Factory Road, Belfast, Christchurch.8005
ZL3AHQ	McDonald, A. W., 318 Cranford Street, St Albans, Christchurch.8005
ZL3AHR	Rietz, B. A., 31 Colwyn Street, Bryndwr, Christchurch.8005
ZL3AHS	Symes, B. A., 5 Gilwell Street, Christchurch.8005
ZL3AHT	Holland, S. M., 15 Zephyr Terrace, Governors Bay, Lyttelton.8012
ZL3AHU	Holland, M. C., 15 Zephyr Terrace, Governors Bay, Lyttelton.8012
ZL3AHV	Papanui High School Radio Club, (Trustee: ZL3AHP), Langdons Road, Christchurch.8005
ZL3AHW	Williams, N. D., 8 Rawhiti Avenue, Christchurch.8009
ZL3AHX	Wells, P. H., 12 Harrow Street, Christchurch.8001
ZL3AHY	Lovell, M. E., 41 Yardley Street, Avonhead, Christchurch.8004
ZL3AHZ	Dalrymple, M. B., 122 Mersey Street, St Albans, Christchurch.8001
ZL3AIA	Allan, J. L., 4 Highfield Lane, Rangiora.8254
ZL3AIB	Timms, R. C., 238 Ilam Road, Christchurch.8004
ZL3AIC	Chilton, M. T., 183 Belfast Road, Belfast, Christchurch.8005
ZL3AID	Hawksley, K. A., 4 Winchfield Street, Christchurch.8007
ZL3AIX	Tillman, E. S., 15 Grimseys Road, Christchurch.8005
ZL3ATP	Pringle, A. T., see ZL5ATP
ZL3NAB	Pringle, W. M.
ZL3NAG	Heazlewood, P. R., 28 Arthur Street, Christchurch.8004
ZL3NAH	Gorton, D. M., 7 Meadowville Avenue, Christchurch.8002
ZL3NAI	Chapman, S. J., 7 Dellow Place, Christchurch.8002
ZL3NAT	Boyes, D. G., 6 Marshall Street, Woolston, Christchurch.8002
ZL3RPS	Radio Preservation Society of New Zealand (Ferrymead) Inc, (Trustee ZL3BI), 269 Bridle Path Road, Christchurch.8002
ZL3TAA	Fletcher, J. N., 7 Waiwera Place, Wairewa.1460
ZL3TAB	Hyde, I. E., 4 Powell Crescent, Christchurch.8004
ZL3TAC	Collins, B. A., 47 Yardley Street, Christchurch.8004
ZL3TAD	Cullen, L., 46 Wilton Crescent, Christchurch.8005
ZL3TAE	Clark, M. W., 474 Manchester Street, Christchurch.8001
ZL3TAF	Taege, B. S., 23 Holderness Place, Avonhead, Christchurch.8004
ZL3TAG	Down, S. J., 219 Grahams Road, Christchurch.8005
ZL3TAI	Grandiek, J. N., Curry Road, R.D. 7, Invercargill.9521
ZL3TAJ	Gill, I. D., River Road, Greenpark, R.D. 2, Christchurch.8021
ZL3TAK	Woods, A. K., 6 Waipara Street, Christchurch.8002
ZL3TAL	Harrison, K. B., 16 Arkwright Place, Halswell, Christchurch.8003
ZL3TAM	Mason, G. J., 6 Bideford Place, Christchurch.8006
ZL3TAN	Roozen, A. A. F., c/- 40 Forbes Road, Tai Tapu.8150
ZL3TAO	MacPherson, I. W., 27 Dunbarton Street, Christchurch.8005
ZL3TAP	Van Schooten, L. A. A., 195b Wairakei Road, Christchurch.8005
ZL3TAR	Johnson, H. M., 14 Arthur Street, Christchurch.8004
ZL3TAS	Prior, C. A., 19 Davidson Crescent, Hornby, Christchurch.8004
ZL3TAT	Baker, E. J. A., Murray Place, Lake Tekapo.8770
ZL3TAV	Parr, W. B., 16a Wildberry Street, Christchurch.8002
ZL3TAW	Smith, M. W. J., 7 Pohutukawa Drive, Opunake.4653
ZL3TAX	Churchward, M. J., 1/39c Middleton Road, Christchurch.8004
ZL3TAY	Ross, M. J., 32 Zephyr Terrace, Governors Bay, R.D. 1, Lyttelton.8012
ZL3TAZ	Greer, R. B., 365 Armagh Street, Christchurch.8001
ZL3TBA	Wong, A. F. D. K., Ilam Flats, Flat 3, Canterbury University, Christchurch.8004
ZL3TBB	Wormald, R. G., 247a Wairakei Road, Bryndwr, Christchurch.8005
ZL3TBC	Grenfell, A. D., 61 Dunbars Road, Christchurch.8003
ZL3TBD	Symonds, A. C., 19 Stiles Place, Burwood, Christchurch.8006
ZL3TBE	Pritchard, D. V., c/- Recreational Res, Duntroon.8950
ZL3TBG	O'Neill, T. J., 89 Pages Road, Christchurch.8006
ZL3TBH	Osborne, R. R. W., c/- Camp David R.D. 3, Waipara.8270
ZL3TBJ	Baird, K. A., 1 Brenchley Avenue, Christchurch.8005
ZL3TBL	Adams, S. R., 9 Baffin Grove, Kingston, Wellington.8002

ZL3TBM	Love, G. T., 171 Main Road, Amberley.8251
ZL3TBO	Tapp, B. S., 8 Kitchener Place, Christchurch.8002
ZL3TBP	Evans, J. S., 11 Eros Place, Christchurch.8009
ZL3TBQ	Johnstone, D. E., 291 Burwood Road, Christchurch.8009
ZL3TBR	Black, D. R., 11 Epsom Avenue, Epsom, Auckland.1003
ZL3TBS	Johnson, J. G., 56 Rototai Road, Takaka.7172
ZL3TBT	Lee, M. O., 260 Cashmere Road, Halswell, Christchurch.8003
ZL3TBU	Watson, A. N., 107 Buffalo Beach Road, Whitianga.2856
ZL3TBW	Stevenson, M. H., 48 Huntsbury Avenue, Huntsbury, Christchurch.8002
ZL3TBZ	Barker, H. J., 900 Lower Styx Road, Christchurch.8009
ZL3TCA	Knewstubb, F. R., 219b Beach Road, Christchurch.8009
ZL3TCC	Norris, T. P., 60 Peer Street, Christchurch.8004
ZL3TCD	McMahon, D. D., 15 Harling Avenue, Christchurch.8002
ZL3TCE	Cobb, P. B., 2 Weymouth Grove, Wainuiomata.6305
ZL3TCG	Deans, J. M., 36 North Terrace, Darfield.8172
ZL3TCH	Chapman, M. H., 23 Huntsbury Avenue, Christchurch.8002
ZL3TCI	Lucas, P. K., Cape Foulwind Road, R.D. 2, Westport.7621
ZL3TCJ	King, T. J., Ashburton Gorge Road, R.D. 1, Ashburton.8300
ZL3TCK	Sands, A. J., 14 Victoria Street, Rangiora.8254
ZL3TCL	Averill, T. L. F., 99 Puriri Street, Christchurch.8004
ZL3TCM	Ramsey, R. B., 31 Rollesby Street, Christchurch.8002
ZL3TCN	Hardie, S. R., 245a Harewood Road, Christchurch.8005
ZL3TCP	Parish, I. J., 2 Hislop Street, Geraldine.8751
ZL3TCQ	Jack, K. S., 45 Hornbrook Street, Temuka.8752
ZL3TCT	McCaw, R. C., 6 Farndale Place, Christchurch.8004
ZL3TCU	Duxbury, J. S., 51 Aorangi Road, Christchurch.8005
ZL3TCV	Garraway, W. A., 120 Warren Crescent, Christchurch.8002
ZL3TCW	Strachan, J. H., 41 New Brighton Road, Christchurch.8006
ZL3TCX	Brewerton, T. R., 14 Crampton Road, Reefton.7853
ZL3TCY	Farrall, N. R., 12 Muir Avenue, Christchurch.8003
ZL3TCZ	Kennedy, K. R., 158 Battery Road, Napier.4001
ZL3TDA	Tapp, S. J., 8 Kitchener Place, Opawa, Christchurch.8002
ZL3TDB	Milne, O. D., 12 Stanbury Avenue, Christchurch.8002
ZL3TDC	Thomson, R. Y., 6 Princes Street, Temuka.8752
ZL3TDD	Marks, J. W. J., 20 Dobson Street, Christchurch.8002
ZL3TDF	Smith, B. A., "Charodale", Old West Coast Road, R.D. 1, Christchurch.8021
ZL3TDG	Jenkins, R. M., 62c Rockinghorse Road, Christchurch.8007
ZL3TDH	Clark, N. L., 37 Radbrook Street, Christchurch.8004
ZL3TDI	Telfer, P. B., 39 Liverton Crescent, Bishopdale, Christchurch.8005
ZL3TDJ	Beazley, D. A., Punga Grove, Hans Bay, Lake Kaniere.7950
ZL3TDK	Emmett, B. A., 1/76 Vivian Street, Christchurch.8009
ZL3TDL	Wright, D. J., 65 Ludstone Road, Kaikoura.7351
ZL3TDM	Harding, J. M., 15 Elm Grove, Christchurch.8001
ZL3TDN	Tait, J. J., 101a Nayland Street, Christchurch.8008
ZL3TDP	Wilson, D. P. H., 67 Aotea Terrace, Christchurch.8002
ZL3TDQ	Downey, E. J., 67 Tuckers Road, Christchurch.8005
ZL3TDR	Smith, K. J., 17 Tyne Street, Timaru.8601
ZL3TDS	Taylor, E. G., 335 Hills Road, Christchurch.8001
ZL3TDT	Drury, B. D., 20 Ryeland Avenue, Fendalton, Christchurch.8004
ZL3TDU	Hislop, G. E., Puketa, R.D. 2, Kaikoura.7351
ZL3TDX	Woods, B. M., 11 Moyna Avenue, Christchurch.8006
ZL3TDY	Cavill, J. P., 36 Outram Grove, Kelson, Lower Hutt.6301
ZL3TFA	Hall, B. W., 27 John Street, Temuka.8752
ZL3TFB	Bool, W. J., 32 Trafalgar Street, New Plymouth.4601
ZL3TFC	Dalton, T. P., Governors Bay Road, Cass Bay, R.D., Lyttleton.8033
ZL3TFD	Rhodes, D., Rapaki, P. O. Box 44, Lyttelton.8033
ZL3TFF	Cook, H. P., 9 Boyne Avenue, Christchurch.8005
ZL3TFG	MacKay, D. R., 56 Purchas Street, Christchurch.8001
ZL3TFH	Hudson, R. F., 109 Shakespeare Street, Greymouth.7801
ZL3TFI	Wright, B. A., 21 Koromiko Street, Christchurch.8002
ZL3TFJ	Lundy, R. J., 47 White Street, Rangiora.8254
ZL3TFK	Weir, R. G., 64a Selwyn Street, Somerfield, Christchurch.8002
ZL3TFL	Maher, R. H., 172e Rockinghorse Road, Christchurch.8007
ZL3TFM	MacFarlane, M. J., 35 Manor Place, Christchurch.8005
ZL3TFN	Wood, K. L. B., 162 Luckens Road, West Harbour, Auckland.1208
ZL3TFQ	Dawkes, R. L., 513 Russley Road, Christchurch.8004
ZL3TFR	Smales, K. A., 42 Manse Road, Kurow.8951
ZL3TFS	Soal, D. F., 62 Nelson Street, Ashburton.8300
ZL3TFT	Morris, P. L., 28 Esperance Street, Christchurch.8005
ZL3TFU	Mathieson, H. M., 349 Main South Road, Hornby, Christchurch.8004
ZL3TFV	Brookes, B. R., 1 Godley Place, Timaru.8601
ZL3TFW	Van Til, H. J., 21 Kimberley Grove, Palmerston North.5301
ZL3TFX	West, R. O., 97 Colombo Street, Christchurch.8002
ZL3TFY	Tizzard, R. W., 9 Cherry Place, Bishopdale, Christchurch.8005
ZL3TFZ	Harris, F. D. E. M., 343 Riccarton Road, Christchurch.8004
ZL3TGA	Aitken, G. D., 38 Hooker Avenue, Bryndwr, Christchurch.8005
ZL3TGB	Graham, J. C., 170 Hampshire Street, Christchurch.8007
ZL3TGC	Davison, C. N., 29 Skerton Avenue, Christchurch.8004
ZL3TGE	Windelburn, W. A., 2/401 Hereford Street, Christchurch.8001
ZL3TGI	Hunter, M., 111 Racecourse Road, Ashburton.8300
ZL3TGJ	Cherry, W. D., 131 Rose Street, Somerfield, Christchurch.8002
ZL3TGL	Van Lindt, R., 4 Westby Street, Christchurch.8002
ZL3TGM	Flecknoe, G. A., 6 Kyeburn Place, Christchurch.8004
ZL3TGN	Richardson, G. R., 127 Rimu Street, Hamilton.2001
ZL3TGP	Parkyn, P. R., 86 Rahera Street, Christchurch.8002
ZL3TGQ	Halverson, D. L., 3 Bastia Avenue, Wanganui.5001
ZL3TGR	Timewell, I. D., P.O.Box 706, Timaru.8600
ZL3TGS	Oliver, A. J., 2/32b Huntsbury Avenue, Christchurch.8002
ZL3TGU	Bissland, D. J., 12 Highgate Avenue, Christchurch.8001
ZL3TGV	Winslade, R. H., 15 Hunt Street, Timaru.8601
ZL3TGW	Hart, A. R. K., 11 Hampton Road, Christchurch.8005
ZL3TGX	Henry, D. H., 34 Alexandra Street, Christchurch.8001
ZL3TGY	Streeter, T. J., 77 View Road, Invercargill.9501
ZL3TGZ	Moyle, C. M., 68 Clyde Road, Christchurch.8004
ZL3THA	Heaton, J., 101 Russell Road, Manurewa, Auckland.1702
ZL3THB	Cree, R. A., 18 Woolley Street, Christchurch.8006
ZL3THD	Claydon, R. C., 45 Liverton Crescent, Christchurch.8005
ZL3THE	Bartlett, K. E., Fairdown, R. D. 1, Westport.7621
ZL3THG	Keeley, L. J., 23 Wills Street, Ashburton.8300
ZL3THH	Smith, G. R., 110 Pages Road, Christchurch.8006
ZL3THI	Wealleans, G. A., 37 Eglington Street, Christchurch.8007
ZL3THJ	Philpott, J. W., 46 Kimberley Street, Christchurch.8005
ZL3THK	Errington, G. S., 9 Kiteroa Place, Christchurch.8002
ZL3THL	Hillary, D. N., 84 Isleworth Street, Christchurch.8005
ZL3THM	Sandford, N. D. O., 45 Torrens Road, Hillmorton, Christchurch.8002
ZL3THN	Price, G. D., 358 Breezes Road, Christchurch.8007
ZL3THO	Lauder, C. D., 118 Gemstone Drive, Upper Hutt.6401
ZL3THP	Platt, R. G., Main South Road, Rolleston.8004
ZL3THQ	Corbett, R. K., 1 Dalton Place, Christchurch.8005
ZL3THR	Buist, A. M., 38 Merlincote Crescent, Governors Bay, Lyttelton.8012
ZL3THU	McMaster, B. T. R., 72 Fleete Street, Christchurch.8006
ZL3THV	Bennett, B. D., "Te Araroa", Station Road, Temuka.8752
ZL3THX	Ferriss, A. E., 50 Marriner Street, Christchurch.8008
ZL3THY	Fearn, R. D., 2/69f David Street, New Plymouth.4601
ZL3THZ	Barron, A. D., 124 St. James Avenue, Christchurch.8005
ZL3TIA	Taylor, D. A., Ski Plane Division, P.O.Box 8, Mt Cook.8770
ZL3TIB	Hely, M. O., R.D. 2, Christchurch.8021
ZL3TIC	Foubister, M. A., 94 Hoon Hay Road, Christchurch.8002
ZL3TIE	Thomas, K. M., 19a Kingham Place, Avonhead, Christchurch.8004
ZL3TIF	Bryant, H. G. H., 129 Scarborough Street, Kaikoura.7351
ZL3TIG	McNeill, R. G., 78 McMaster Street, Invercargill.9501
ZL3TII	Freeth, G. D., 25 Ngarimu Street, Christchurch.8006
ZL3TIJ	Wilde, R. C., Gladstone Street, Hawarden.8274
ZL3TIK	Rodgers, P. N., 29 Porter Street, Ashburton.8300
ZL3TIL	Errington, J. G., 11 Paparoa Street, Christchurch.8005
ZL3TIO	Stewart, P. G. C., 76 Patten Street, Christchurch.8006
ZL3TIQ	McCorkindale, D. R., 52 Canada Street, Timaru.8601
ZL3TIR	Williams, P. S., 24 Newnham Terrace, Christchurch.8004
ZL3TIS	Donnelly, E. J., 249 Bower Avenue, Christchurch.8009
ZL3TIU	Cole, L. J., 5 Sheehen Road, Te Atatu South, Auckland.1208
ZL3TIX	Stevens, J. B., 15 Bevington Street, Christchurch.8004
ZL3TIY	Fyffe, N. B. H., 31a McBratneys Road, Christchurch.8006
ZL3TIZ	Dixon, B. J., 81 Shakespeare Street, Greymouth.7801
ZL3TJA	Thompson, D. A. J., 19 Tawa Street, Timaru.8601
ZL3TJB	Johnstone, P., 419 Cashmere Road, Christchurch.8003
ZL3TJC	Briggs, N. E., 124 Riverside Drive, Whakatane.3400
ZL3TJD	Wilson, P. J., Bottom Flat, 85 Overtoun Terrace, Hataitai, Wellington.6003
ZL3TJF	Barrington, R. K., c/- J. L. Matheson, Mata Road, R.D. 1, Kohukohu.0471
ZL3TJH	Robinson, P. J., 20 Leonie Place, Christchurch.8007
ZL3TJI	Senior, G. J., Homle Station, R.D. 2, Timaru.8621
ZL3TJJ	Ward, A. J., 178 Bridle Path Road, Christchurch.8002
ZL3TJK	Lorimer, B. C., Opuha Street, Orari., P.O.Box 35, Orari.8750
ZL3TJL	Lye, R. D., 7 Cromer Place, Christchurch.8007
ZL3TJM	Dillon, G. A., 35 Huntsbury Avenue, Christchurch.8002
ZL3TJN	Hills, M. P. A. T., Wilsons Road, R.D. 9, Feilding.5600

ZL3TJO	Sutherland, J. G. D., 12 Jocelyn Street, Christchurch.8005
ZL3TJP	Walker, R. W., c/- 56a Burwood Road, Christchurch.8009
ZL3TJQ	Potter, A. R., 1 Titoki Street, Christchurch.8004
ZL3TJR	Carter, R. S., 34 Cameron Street, Ashburton.8300
ZL3TJS	Whitfield, B. W., 101 Soleares Avenue, Mt. Pleasant, Christchurch.8008
ZL3TJT	Nicol, J. R., 10 Lochee Street, Christchurch.8004
ZL3TJU	McConnell, M. M., Orchard Reserve, 111 Gardiners Road, Christchurch.8005
ZL3TJV	Osborne, K. W., 67 MacDonald Street, Timaru.8601
ZL3TJW	Rickard, B. S., 37 Nelson Street, Ashburton.8300
ZL3TJX	Laughton, T. J., 43 Rowley Avenue, Hoon Hay, Christchurch.8002
ZL3TJY	Allan, S. E. (Mrs), 4 Highfield Lane, Rangiora.8254
ZL3TKA	Gumbrell, C. B., 47 Caulton Street, Auckland.1105
ZL3TKB	Bryenton, W. D., 16 Aldersley Street, Christchurch.8001
ZL3TKC	Lawton, C. J. M., 48 Hazelwood Avenue, Hamilton.2001
ZL3TKD	Godfrey, C. Y., R. D. 2, Kaikoura.7351
ZL3TKE	Vallance, D. J., 39 Vancouver Crescent, Wainoni, Christchurch.8006
ZL3TKF	Greentree, P. C., 34 Rata Street, Christchurch.8004
ZL3TKG	Neill, R. N., 39 Ellesmere Crescent, Palmerston North.5301
ZL3TKI	Empson, T. M., 53 McKenzie Avenue, Christchurch.8002
ZL3TKJ	Forsythe, L. J., 65a East Belt, Lincoln.8152
ZL3TKK	Johnston, A. R., R.D. 11, Rakaia.8355
ZL3TKM	Cox, A. R., 54 Hawkesbury Avenue, St.Albans, Christchurch.8001
ZL3TKO	Jaynes, V., Lookout Road, R.D. 2, Takaka.7172
ZL3TKP	Gardiner, I. D., 29 Kellys Road, Christchurch.8005
ZL3TKQ	McInnes, G. W., P.O.Box 13 689, Christchurch.8031
ZL3TKR	Dwyer, D. S., 15 Cygnet Street, Christchurch.8009
ZL3TKS	Thomas, A. J., DSIR Physical Engineering Laboratory, Omakau.9182
ZL3TKT	Grant, L. J., c/- Mrs J. Stackhouse, 16 Clayton Road, Amberley.8251
ZL3TKV	Lang, A. N., 62 Rahera Street, Christchurch.8002
ZL3TKW	Williamson, I. S., c/- 14 Ebbing Place, Christchurch.8005
ZL3TKX	Patterson, H. W., 33 Leinster Terrace, Lincoln.8152
ZL3TKZ	McFarlane, S. A., 37 Hawford Road, Christchurch.8002
ZL3TLB	Crawford, C. R., 81 Balrudry Street, Christchurch.8004
ZL3TLE	Weir, D. R. (Mrs), 64a Selwyn Street, Christchurch.8002
ZL3TLF	Mitchell, K. C., 96 Pohutukawa Avenue, Ohope.3454
ZL3TLG	Steffensen, K. A., 10a Sefton Street, Belfast, Christchurch.8005
ZL3TLI	Rowe, B. C. T., 40 Harris Street, Waimate.8791
ZL3TLJ	McConnell, D. A., Orchard Reserve, 111 Gardiners Road, Christchurch.8005
ZL3TLM	Mills, M. D., 87 Wattle Drive, Christchurch.8009
ZL3TLO	McCombs, J. D., 8 Freeman Street, Christchurch.8008
ZL3TLQ	Harrall, E. D., 90 Gayhurst Road, Dallington, Christchurch.8006
ZL3TLR	Lee, P. B., 23a Salford Avenue, Christchurch.8005
ZL3TLT	James, K. D., 442 Pinehill Road, Dunedin.9001
ZL3TLU	Chapman, R. C., 30 Picton Avenue, Christchurch.8001
ZL3TLV	Chapman, B. K. (Mrs), 30 Picton Avenue, Christchurch.8001
ZL3TLW	Perry, S. J., 255 Hoon Hay Road, Christchurch.8002
ZL3TLX	Vickers, L. W., 17 Walkers Road, Lyttelton.8012
ZL3TLZ	Bettridge, A. H. J., 81 Pine Avenue, Christchurch.8007
ZL3TMA	Bettridge, M. J., 2 Cook Street, Carters Beach, Westport.7601
ZL3TMC	McGregor, W. L., Flat 3, 184 Fitzgerald Avenue, Christchurch.8001
ZL3TMF	Wilson, J. O., 9 Merton Street, Hobsonville, Auckland.1450
ZL3TMG	Davidson, F. W., 24 Roberts Road, Christchurch.8004
ZL3TMH	Hutchison, B., 15 Tabart Street, Christchurch.8002
ZL3TMJ	Hughes, R. E., 158 Jollie Street, Hokitika.7900
ZL3TMK	Officer, B. C., 40 Redwood Avenue, Tawa.6203
ZL3TMM	Watson, P. M. J., 54 Kent Lodge Avenue, Christchurch.8004
ZL3TMO	Godkin, R. W., 31 Cardrona Street, Christchurch.8006
ZL3TMP	Pringle, N. F., Gladstone Street, Hawarden.8274
ZL3TMQ	Pot, M. J., 6 Te Kiteroa Grove, Wellington.6004
ZL3TMR	Waters, G. A. S., 19 Carole Crescent, Pakuranga.1706
ZL3TMV	Nicholls, P. J., 33 Seven Mile Road, Runanga.7854
ZL3TMY	Payne, D. W., 204 Rutland Street, Christchurch.8005
ZL3TNC	Andrew, E. D. B., 448b Harewood Road, Bishopdale, Christchurch.8005
ZL3TNE	Egan, P. D., see overseas members
ZL3TNG	Hulston, G. F., 4 Kaitangata Crescent, Kelson, Lower Hutt.6301
ZL3TNH	Drowley, C. A., 15 Moonstone Grove, Upper Hutt.6401
ZL3TNI	Sinclair, L. C., 28 Palmside Street, Spreydon, Christchurch.8002
ZL3TNJ	Davis, B., 59 Carnarvon Street, Linwood, Christchurch.8006
ZL3TNK	Von Biel, H. A., 149d Major Hornbrook Road, Christchurch.8008
ZL3TNL	Maunsell, P. B., 31 Barrie Street, Christchurch.8002
ZL3TNO	Pearce, S. J., 21 Glenmore Avenue, Christchurch.8005
ZL3TNS	Clay, P. D., 5 Appleby Highway, Richmond, Nelson.7002
ZL3TNW	McRobie, W. D., 47 Maltby Avenue, Timaru.8601
ZL3TNX	Allison, H. C. F., 59 Hounslow Street, Christchurch.8004
ZL3TNY	Brown, S. D., 78a Hackthorne Road, Christchurch.8002
ZL3TNZ	Gillick, K. J., 119a Prestons Road, Christchurch.8005
ZL3TOA	Gowers, R. J., Petern Street, Hinds.8351
ZL3TOB	Berry, R. D. E., c/- Electrical & Electronic Engineering Dept, University Of Canterbury, Private Bag, Christchurch.8030
ZL3TOC	Marshall, R. W., 19 Fraser Crescent, Twizel.8773
ZL3TOD	Robertson, C., 15 Wittys Road, Avonhead, Christchurch.8004
ZL3TOE	Steel, P. J., 57 Woolley Street, Wainoni, Christchurch.8007
ZL3TOF	Warren, P. A., 313 Wainoni Road, Christchurch.8007
ZL3TOG	Smith, R. J., 18 Hazelwood Avenue, Karori, Wellington.6005
ZL3TOH	Fordyce, A. A., 28 Meadow Street, Christchurch.8005
ZL3TOI	King, A. F., 2/363 Withells Road, Christchurch.8004
ZL3TOJ	Meyers, D. R., Carrs Road, Loburn, R.D. 2, Rangiora.8254
ZL3TOM	Moates, C. M. G., Private Bag, Parakao, Whangarei.0250
ZL3TON	Roy, E., 106 Hills Road, Christchurch.8001
ZL3TOO	Sullivan, C. D., 14 Bidwell Place, Christchurch.8002
ZL3TOP	Back, C. R., 42-44 Charles Street, Kaiapoi.8252
ZL3TOR	Turnbull, J. W. M., 304 Cannon Hill Crescent, Christchurch.8008
ZL3TOT	Foster, P. J., 5a Vancouver Crescent, Christchurch.8006
ZL3TOV	Martin, B. E., Taipa Heights Drive, Taipa, Whangarei.0101
ZL3TOZ	Hurst, D. W., 31 Wakanui Road, Ashburton.8300
ZL3TPE	Obers, W. L. T., 154 Ross Street, Invercargill.9501
ZL3TPI	Parry, D. G., 18 Sunvale Terrace, Cashmere, Christchurch.8002
ZL3TPO	Turnbull, P. D., 21 Earp Street, Johnsonville, Wellington.6004
ZL3TPQ	Whittam, J. S., 8 Bevington Street, Avonhead, Christchurch.8004
ZL3TPT	Thompson, B. N., 18 Gunns Crescent, Christchurch.8002
ZL3TPU	Jackson, W. G., 117 Fisher Parade, Pakuranga, Auckland.1706
ZL3TPV	Holland, D. J., 117 Brynley Street, Christchurch.8004
ZL3TPW	Burdekin, B. W., 180 Huxley Street, Christchurch.8002
ZL3TPY	Fotheringham, J. P., 45 Wilkie Crescent, Naenae, Wellington.6301
ZL3TPZ	Campbell, G. J., 23 O'Briens Road, Sockburn, Christchurch.8004
ZL3TQC	Graham, J. N., 90 Churchill Street, Kaikoura.7351
ZL3TQD	Roxburgh, J. G., 13 Pound Road, Leeston.8151
ZL3TQE	Aitchison, M. S., 61 Longfellow Street, Christchurch.8002
ZL3TQF	Greatbanks, J., c/- Comers Road, R.D. 1, Whitianga.2856
ZL3TQH	Wiltshire, R., 4 Merton Place, Christchurch.8005
ZL3TQJ	Morrison, L. I., 82a Wansbeck Street, Oamaru.8901
ZL3TQN	Strachan, J. W., 13 Rimu Street, Timaru.8601
ZL3TQP	Taitoko, A. J., 16 Portland Street, Dargaville.0300
ZL3TQQ	Allan, L. R., 45 Pine Avenue, Christchurch.8007
ZL3TQX	Slatter, S. E., 135 Sumnervale Drive, Christchurch.8008
ZL3TRA	Johnson, D. A., 16 Romilly Street, Westport.7601
ZL3TRB	Brace, A. J., 14 Queen Street, Westport.7601
ZL3TRG	Genet, R., c/- NZ Post, Kaniere, Hokitika.7950
ZL3TRH	Anderson, B. M., House 3, Seaview Hospital, Hokitika.7900
ZL3TRI	Beckmann, L., 3 Coups Terrace, Kaiapoi.8252
ZL3TRJ	Spurdle, D. P., 48 Wimborne Crescent, Christchurch.8006
ZL3TRL	Parker, G. T., 4 Margot Lane, Christchurch.8008
ZL3TRM	Mattingley, G. T., 89 Creek Road, Ashburton.8300
ZL3TRN	Brammah, L., 31 Rata Street, Christchurch.8004
ZL3TRO	Gibbs, R. J., 23 Oxford Road, Rangiora.8254
ZL3TRQ	Quantick, L. H., 4 Ayers Street, Rangiora.8254
ZL3TRR	Nixon, H. E., 10 Dulles Place, Christchurch.8005
ZL3TRS	Moran, S. P., 38 Colesbury Street, Christchurch.8005
ZL3TRU	Jones, S., 20 Morley Street, Christchurch.8005
ZL3TRV	Robbins, D. J., 66 Acacia Avenue, Christchurch.8004
ZL3TRW	Powell, J., P.O.Box 15, Waikari.8276
ZL3TRX	Hadler, D. J., 11 De Havilland Street, Christchurch.8004
ZL3TRZ	Anderson, J. C., 191 West Belt, Rangiora.8254
ZL3TSA	Adams, R. J., 49 Hilton Street, Kaiapoi.8252
ZL3TSG	Van Royan, G. H., Woodbury Road, R.D. 21, Geraldine.8751
ZL3TSJ	Cole, G. J., Grange Settlement Road, Temuka.8752
ZL3TSM	Miller, N. E. (Mrs), 30 Fairford Street, Christchurch.8005

ZL4 Callsigns

ZL4AA	Otago Branch NZART (Inc.), see Branch Directory
ZL4AB	Gray, H. A., 102 Brownston Street, Wanaka.9192
ZL4AC	Lowe, A. F., 287 Barrow Street, Bluff.9503
ZL4AE	Wesley, I. C., 34 Truby King Street, Merrilands, New Plymouth.4601
ZL4AF	Falconer, A. E., Whiterig, No. 1 R.D., Gore., P. O. Box 214, Gore.9700
ZL4AG	Boshier, R. F., 30 Ayton Drive, Glenfield, Auckland.1310
ZL4AH	Sansom, W. R., 8 Puriri Street, Timaru.8601
ZL4AI	Shore, K. H., 1 Upland Street, Dunedin.9001
ZL4AJ	Agnew, A. C., 105 Cavell Street, Dunedin.9001
ZL4AK	Dowman, W. F., 99 Aln Street, Oamaru.8901
ZL4AL	Eastern Southland Branch NZART (Inc.), see Branch Directory
ZL4AO	Allan, A. N., Charlton, No. 4 R.D., Gore.9700
ZL4AP	Smith, R. C., Pine Bush, No 1 R.D., Wyndham.9758
ZL4AQ	Whyte, R. A., 7 Charles Street, Gore.9700
ZL4AR	Cole, R. S., 46 Walton Park Avenue, Fairfield, Dunedin.9006
ZL4AS	Gray, L. C., 16 Lincoln Terrace, Balclutha.9200
ZL4AT	Treweek, C. A. (Mrs), 576 Herbert Street, Invercargill.9501
ZL4AU	Ernst, R. W., "Hollypine", Roslyn Bush Road, R.D. 2, Invercargill.9521
ZL4AV	Christie, G. A., 37 Garnet Street, Gore.9700
ZL4AW	Pickford, W. J., Black Road, 9 R.D., Invercargill., P.O.Box 491, Invercargill.9500
ZL4AX	Sandford, H. D., 130 MacAndrew Road, Dunedin.9001
ZL4AY	McLeod, J. H., 39 David Street, Invercargill.9501
ZL4AZ	Sidey, T. K. S., 16 Tolcarne Avenue, Dunedin.9001
ZL4BA	Jones, G. L., 8 Yare Lane, Balclutha.9200
ZL4BC	Ferris, J. L., 7 Peterson Place, Bridge Hill, Alexandra.9181
ZL4BD	Helean, F. P., 3 Passmore Crescent, Maori Hill, Dunedin.9001
ZL4BE	Whiteley, F., 31 Maybank Street, Opoho, Dunedin.9001
ZL4BF	Smith, L. K., 1a Wycherley Drive, Bucklands Beach, Auckland.1704
ZL4BG	Mitchell, J. R., 49 McKerrow Street, Dunedin.9001
ZL4BH	East Otago High School Radio Club, (Trustee: ZL4FI), P. O. Box 58, Palmerston, Otago.9161
ZL4BI	Caldwell, J., Seaward Road, Edendale, Invercargill.9752
ZL4BJ	Wickens, J. R., 9 Fleet Street, Masterton.5901
ZL4BK	McDonald, N. M., 3 Kinloch Street, Blenheim.7301
ZL4BL	Millar, T. E., 38 Begg Street, Dunedin.9001
ZL4BM	McCallum, R. H., Ashley Downs, R.D., Clinton.9252
ZL4BN	Collett, D. K., 33 Dryden Street, Milton.9254
ZL4BO	Jackson, V. R., Milton Park, R. D. 1, Invercargill.9521
ZL4BP	Collett, W. G., 35 Wharfdale Street, Macandrew Bay, Dunedin.9003
ZL4BQ	Brown, A. R., Wainakarua Road, Kakanui, Oamaru.8950
ZL4BR	Thompson, H. G., 47 Forth Street, Mataura.9753
ZL4BS	Aldridge, J. T., 87 Trevors Road, Ashburton.8300
ZL4BT	McKenzie, J. D., 268 Wai-iti Road, Timaru.8601
ZL4BU	Stephens, R. D., 72 Wilfrid Street, Invercargill.9501
ZL4BV	McConnell, J. R., 73 Banks Street, Invercargill.9501
ZL4BW	Williamson, B. C., Horrace Street, Cromwell.9191
ZL4BX	Anderson, J. L., 64 Main Road, Brighton, Dunedin.9151
ZL4BY	Jenner, M. G., 40 Murano Street, Dunedin.9001
ZL4BZ	Eve, C. R., c/- Tauraroa Area School, R. D. 8, Whangarei.0121
ZL4CA	Williamson, A. E., Leicester Street, Hampden.8950
ZL4CB	Costigan, L. J., 46 Bayne Street, Invercargill.9501
ZL4CC	Checketts, C. V. (Mrs), 21 Highfield Terrace, Invercargill.9501
ZL4CD	Dimmock, C., 92 Exmouth Street, Invercargill.9501
ZL4CF	McLaren, A. D., 16 Melbourne Street, South Dunedin.9001
ZL4CG	Bathurst, C. F., Mokotua, R. D. 7, Invercargill.9521
ZL4CH	Spry, W. D., 6 Clementine Lane, Christchurch.8008
ZL4CI	Stronach, N., 78 View Street, Manapouri.9680
ZL4CK	Wark, A. J., 1 Sutcliffe Street, Dunedin.9001
ZL4CM	Martin, A. J. T., 8 Lark Street, Oamaru.8901
ZL4CN	Peterson, A. McN., 26 Aotea Street, Dunedin.9001
ZL4CP	Baird, O. L., 131 Nelson Street, Invercargill.9501
ZL4CR	Middleton, C. E., 36 Green Street, Mosgiel.9007
ZL4CT	Southland Boys High School Radio Club, (Trustee: ZL4LX), 215 Herbert Street, Invercargill.9501
ZL4CU	Dudley, G. J., Pomona Road, R. D. 11, Invercargill.9521
ZL4CV	McKenzie, J., c/- Chateau Blanc, P.O.Box 25-163, Christchurch.8030
ZL4CW	Barker, W. G., 30 Kowhai Avenue, Invercargill.9501
ZL4CY	Shaw, W., c/- Railway Hotel, Invercargill.9501
ZL4CZ	Brain, E. R., 38 Cranley Street, Dunedin.9001
ZL4DA	Harman, I. A., 49 Alexander Street, Abbotsford, Green Island.9006
ZL4DB	Cahill, E., Earnscleugh Road, Alexandra.9181
ZL4DC	Cambridge, D. A. H., R. D. 1, Cromwell.9191
ZL4DD	Van Veen, H. M. G., 161 Evans Street, Ohope, Dunedin.9001
ZL4DE	Magon, T. E., see overseas members
ZL4DF	MacDonald, V. E., 5 Perth Street, Mosgiel.9007
ZL4DG	Wolf, W. G. W., 1 Freyberg Road, Fairfield, Dunedin.9006
ZL4DI	Bain, C. R., 24 McKerrow Street, Waverley, Dunedin.9001
ZL4DJ	Baird, R. A., 87 Ventry Street, Alexandra.9181
ZL4DK	Mulder, D. J., 60 Ashworth Street, Alexandra.9181
ZL4DL	Leslie, A. J., 8 Stanley Street, Mornington, Dunedin.9001
ZL4DN	Sharp, J. R., 41 Greenhill Avenue, Wakari, Dunedin.9001
ZL4DO	Sutton, R. J., 4a Crompton Road, Massey, Auckland.1208
ZL4DP	Ewens, W. S., 215 Broughton Street, Gore.9700
ZL4DQ	Maslen, I. A., 62 Chambers Street, Dunedin.9001
ZL4DR	Irving, J. T., 28 King Street, Mosgiel.9007
ZL4DS	Carr, D. W., 46 Saunders Street, Dunedin.9001
ZL4DT	Preddy, S. G., 105 Glenross St., Dunedin.9001
ZL4DU	Stiglish, C. A., 58 Argyle Street, Mornington, Dunedin.9001
ZL4DV	Richards, P. D., 18 Holyhead Street, Outram.9155
ZL4DW	Babington, A. M., 162 Pomona Street, Invercargill.9501
ZL4DX	Anstice, S. R., 293 York Place, Dunedin.9001
ZL4DY	Daniel, E. H., 4 Reddecliffe Crescent, Ashburton.8300
ZL4DZ	Willetts, N. E., 23 Yarmouth Street, Balclutha.9200
ZL4FA	Spittle, B. J., 17 Pioneer Crescent, Helensburgh, Dunedin.9001
ZL4FC	Dominey, R. J., 67 King Street, Timaru.8601
ZL4FD	Hedge, H. G., 1/23a Eversleigh Road, Takapuna, Auckland.1309
ZL4FE	McConnachie, M. J., 3 Lakeside Drive, Lake Waitaki.8950
ZL4FF	Gillies, I. B., 7 Duncraig Street, Invercargill.9501
ZL4FG	Russell, W. J., 255 Yarrow Street, Invercargill.9501
ZL4FH	Hall, J. N., 8 Watkin Street, Pine Hill, Dunedin.9001
ZL4FI	Askin, M. G., Moeraki, R. D. 2, Palmerston, Otago.9161
ZL4FJ	Austin, F. J., 8 Dunblane Street, Dunedin.9001
ZL4FK	Fisher, K. G., 7 Nepal Place, Christchurch.8005
ZL4FL	Farquharson, D. A., 134 Martin Road, Fairfield.9006
ZL4FP	McLeod, R. J., 134 Bay View Road, Dunedin.9001
ZL4FR	Jeromson, W. J., 196 Highcliff Road, Dunedin.9001
ZL4FS	Faulkner, D. N., 11 Parkdale Drive, Wanganui.5001
ZL4FT	Mitchell, G. L., 7a Tudor Lane, Mosgiel.9007
ZL4FV	Willoughby, J. R., 136 Elizabeth Street, Invercargill.9501
ZL4FW	Watson, P. J., Curio Bay, No. 1 R.D., Tokanui, Invercargill.9671
ZL4FX	O'Reilly, P. R., 60 Surrey Street, Dunedin.9001
ZL4FY	Pert, P. E., 104 Hall Road, Sawyers Bay, Dunedin.9008
ZL4FZ	Smart, R. G., 26 Olivine Street, Christchurch.8001
ZL4GA	Homer, G. C., 5 Conway Street, Macandrew Bay, Dunedin.9003
ZL4GB	Carter, D. J., 60 Antrim Street, Invercargill.9501
ZL4GC	Shand, T. J., 52 Bremner Road, Fairfield, Dunedin.9006
ZL4GD	Wilkey, T. G., 68 Marine Parade, Bluff.9503
ZL4GE	Hurring, C. J., 1a Belmont Lane, Dunedin.9001
ZL4GF	Balan, S. C., 45a Brandon Road, Glen Eden, Auckland.1207
ZL4GG	Boddy, K. H., 47 Newcastle Street, Clyde.9180
ZL4GJ	Service, T. R., 5 Bremridge Place, Hamilton.2001
ZL4GK	Colvin, L. J., 6 Grant Road, Gisborne.3801
ZL4GL	Gilder, N. J., 37 Pomona Street, Gore.9700
ZL4GM	Ellis, D. N., 146 Exmouth Street, Invercargill.9501
ZL4GN	Lodge, S. F., 35 Graham Street, Mosgiel.9007
ZL4GO	Thomas, M. E., 27 Stirling Crescent, Mosgiel.9007
ZL4GQ	Southland Branch NZART (Inc.), see Branch Directory
ZL4GR	Walsh, T., 17 McKinnon Terrace, Sunshine Bay, Queenstown.9692
ZL4GS	Graham, E. J. W., F2/426 Armagh Street, Christchurch.8001
ZL4GT	Skinner, L. C., 200 Surrey Street, Dunedin.9001
ZL4GU	Brentwood, P. L., 39a Greenstone Place, Fernhill, Queenstown.9692
ZL4GV	Wilkey, D. G., 68 Marine Parade, Bluff.9503
ZL4GW	McDonald, B. N., 45 Goodman Street, Windsor, Christchurch.8006
ZL4GX	Collie, D. B., 48 Thurso Street, Invercargill.9501
ZL4GY	Wills, M. E., 48 Purdue Street, Invercargill.9501
ZL4HA	Young, B. S., 9 Crescent Street, Purakanui, R.D. 1, Port Chalmers.9030
ZL4HB	Rolton, G. L., 25 Lowe Street, Dunedin.9001
ZL4HC	Waters, M. J., 6 Barling Street, MacAndrew Bay, Dunedin.9001
ZL4HD	Findlater, J. L. L., 37 Gormack Street, Balclutha.9200
ZL4HE	Montgomery, A. M., 4 Hoylake Street, Outram.9255
ZL4HF	Kindon, H. A. R., 53 Montague Street, Dunedin.9001
ZL4HG	McNeill, S. J. E., 86 Waddington Drive, Lower Hutt.6301
ZL4HI	Bruce, F., 1 Croydon Place, Kamo, Whangarei.0101
ZL4HJ	Bulger, J. W. P., 1 King Street, Mosgiel.9007

ZL4HK	McNaught, R. G., 217 Princess Street, Invercargill.9501
ZL4HL	Smirk, A. H. C., 68 Cannington Road, Maori Hill, Dunedin.9001
ZL4HM	Whelan, M. L., 142 West Street, Invercargill.9501
ZL4HN	Booth, W. J., Drummond, R.D. 8, Invercargill.9521
ZL4HO	Sutton, K. E., 97 Grey Street, Invercargill.9501
ZL4HP	Rait, B. G., Longwood, No. 1 R.D., Riverton.9654
ZL4HQ	Williams, J. C., 143 Albert Street, Invercargill.9501
ZL4HR	Nisbet, G. J., 33 Sutcliffe Street, Dunedin.9001
ZL4HS	Marsh, W. J., 34 Fair View Terrace, Sawyers Bay, Dunedin.9008
ZL4HT	Powley, D. M. L. J., 82 Catherine Crescent, Newlands, Wellington.6004
ZL4HW	Robertson, K. W., 223 Herbert Street, Invercargill.9501
ZL4HX	Paulson, R., St. Peters School, Kakapo Street, Gore.9700
ZL4HY	Baxter, P. M. (Mrs), 456 Peninsula Road, Kelvin Heights, Queenstown.9692
ZL4IA	Baker, J. C., Beacon Point Road, Wanaka, Central Otago.9192
ZL4IB	Williams, R. F., c/- F. L. Williams, 12a Stuart Street, Levin.5500
ZL4IC	Cockeram, M. R., Actaeon Road, Makarewa, R.D. 6, Invercargill.9521
ZL4ID	Hill, S. G., 54 Rhodes Terrace, Dunedin.9001
ZL4IE	Mason, J. A., 29 Cannington Road, Dunedin.9001
ZL4IG	Fox, A. R. E., 30 Vyner Road, Otatara, R.D. 9, Invercargill., P.O. Box 475, Invercargill.9500
ZL4IH	Frame, S. R., 38 Melbourne Street, Invercargill.9501
ZL4II	Hollebon, K. W., Irvine Road, 2 R.D., Dunedin.9021
ZL4IK	Emslie, C. R., 47 Barr Street, Dunedin.9001
ZL4IM	Norton, J., c/- Private Bag, Pukerau, Southland.9750
ZL4IN	Faulkner, W. E., 124 Frank Street, Gore.9700
ZL4IO	Malkin, M. J. (Mrs), 1007 Konini Street, Hastings.4201
ZL4IQ	Knowles, D. C., 29 Tasman Road, Otematata.8950
ZL4IR	Jensen, M. D., 12 Lochiel Road, Khandallah, Wellington.6004
ZL4IS	Smirk, B. A., 68 Cannington Road, Maori Hill, Dunedin.9001
ZL4IT	Sawyers, R. N., 70 Preston Crescent, Dunedin.9001
ZL4IU	Swale, C. S., 13/60 Stirrat Street, Invercargill.9501
ZL4IV	Looser, E. A., 6b Runciman Street, Green Island, Dunedin.9006
ZL4IW	Holden, P. J., 175 Scott Street, Dunedin.9001
ZL4IX	Hasler, D. G., 10 Meon Street, Oamaru.8901
ZL4IZ	Jeffery, I. W., 7 Point Bush Road, Waimate.8791
ZL4JA	Birse, K. C., 14 Martbern Crescent, Christchurch.8005
ZL4JC	McLennan, E. J. (Mrs), 11 Emerson Street, Concord, Dunedin.9006
ZL4JD	Dudley, J. T., 11 Fraser Street, Waikiwi, Invercargill.9501
ZL4JE	Elliot, J., 36 Grange Street, Dunedin.9001
ZL4JF	South Otago Branch NZART (Inc.), see Branch Directory
ZL4JG	MacDonald, E. R., 318 Main South Road, , Dunedin.9006
ZL4JH	Harrow, J. C., 529 Tweed Street, Invercargill.9501
ZL4JI	Woods, J. R., Taiepa Road, Otatara, R.D. 9, Invercargill.9521
ZL4JJ	Ferris, R. J., 269 Stokes Valley Road, Stokes Valley.6306
ZL4JK	Stanton, M. G., 44 Koa Street, Gore.9700
ZL4JL	Stewart, R. D., 4 Arawa Street, Gore.9700
ZL4JM	Richardson, J., 87 Newcastle Street, Clyde.9180
ZL4JN	Haig, A. V., 43 Melbourne Street, Dunedin.9001
ZL4JO	Johnstone, M. O., Newhaven, 1 R.D., Owaka.9255
ZL4JP	McKenzie, G. A., Waiparu, No. 7 R.D., Gore.9700
ZL4JQ	Torrance, A. M., 16 Lupton Street, Waverley, Wanganui.5182
ZL4JR	Rait, J. N. (Mrs), Longwood, No. 1 R.D., Riverton.9654
ZL4JS	Stonehouse, R. P. M., 40 Mornington Road, Dunedin.9001
ZL4JT	Jennings, J. T., 15 Coolock Street, Dunedin.9001
ZL4JU	Middleton, C. H., c/- Alpine Helicopters, R.D. 1, Cromwell.9191
ZL4JV	Barry, J. M., Malling Road, Redwood Valley, Richmond.7031
ZL4JW	Watson, R. J., 13 Oregon Drive, Kelvin Heights, Queenstown.9692
ZL4JX	Rait, R. J., Longwood, R.D. 1, Riverton.9654
ZL4JZ	Woodward, A. E., c/- Woodward, Baton Valley, R.D. 2, Wakefield.7181
ZL4KA	Spence, P. C., 62 Roy Crescent, Concord, Dunedin.9006
ZL4KB	Gearing, W. J., Felldene Farm, R. D. 2, Wakefield, Nelson.7181
ZL4KC	Air Training Corps Radio Club No. 12 Invercargill Squadron, (Trustee: ZL4OH), Army Hall, Victoria Avenue, Invercargill.9501
ZL4KD	Kirk, B. B., 24 Grand View Road, Auckland.1105
ZL4KE	Colyer, J. V., 17 Clutha Street, Alexandra.9181
ZL4KF	France, K. N., 41 Glencarron Street, Alexandra.9181
ZL4KG	Rhodes, T. W., 78 Spottiswoode Street, Andersons Bay, Dunedin.9001
ZL4KH	Shine, D. H. J., 11 Northview Crescent, Roslyn, Dunedin.9001
ZL4KJ	Robertson, D. C., 45 Maitland Street, Invercargill.9501
ZL4KK	Gillick, M. M., 30 Oakland Street, Dunedin.9001
ZL4KL	Lister, K. B., 37 Marine Parade, Macandrew Bay, Dunedin.9003
ZL4KM	Craig, A. J., 3 Milner Street, Oamaru.8901
ZL4KN	Findlater, R. B., 36 Coast Road, Karitane.9160
ZL4KO	Williams, T. J., 48 Every Street, Dunedin.9001
ZL4KP	Cochrane, W. G., 19 Centennial Avenue, Balclutha.9200
ZL4KR	Pearce, A. M., 173 Helensburgh Road, Dunedin.9001
ZL4KT	Waring, D., 35 Rata Drive, Otematata.8950
ZL4KU	Taylor, S. J., 66 Royal Terrace, Alexandra.9181
ZL4KV	Patton, J. A., 15 Kensington Place, Taupo.3300
ZL4KW	Kibblewhite, K. C., Larch Hill, Frankton Road, Queenstown.9692
ZL4KX	McCormick, B. P., 39 Moana Crescent, Dunedin.9001
ZL4KY	Jones, H. A., 1 Edinburgh Place, Balclutha.9200
ZL4KZ	Lobb, R. J., 62 Sydney Street, Invercargill.9501
ZL4LB	Beagley, G. T., Precelley Street, Allanton, R. D. 2, Mosgiel.9032
ZL4LC	Carroll, E. P., 6 Benhar Street, Dunedin.9001
ZL4LD	Haines, P. C., 37 Wairoa Street, Dunedin.9001
ZL4LE	Evans, L. M., Tussock Creek, R. D. 6, Invercargill.9521
ZL4LF	Masterton, D., 17 Lochend Street, Dunedin.9001
ZL4LG	Beardsmore, G. F., 15 Penrich Street, Green Island, Dunedin.9006
ZL4LH	Milsom, P. S., 20 Lanark Street, Mosgiel.9007
ZL4LI	Amon, L. E. S., 700 Castle Street, Dunedin.9001
ZL4LJ	McKenzie, A. I., 24 Scotland Terrace, Green Island, Dunedin.9006
ZL4LK	Whitty, M. J., 20 Edinburgh Street, Green Island, Dunedin.9006
ZL4LL	Benson, J. A., 15 Heath Street, Andersons Bay, Dunedin.9001
ZL4LM	Nallawalla, A., c/- 1 Upland Street, Dunedin.9001
ZL4LN	Tall, E. J., 19 Graham Street, Mosgiel.9007
ZL4LP	Sellar, K. R., 34 City Road, Dunedin.9001
ZL4LR	Hunt, F. G., 38 Dame Street, Waikouaiti.9162
ZL4LS	Howie, G. A., 12 Theyers Street, Alexandra.9181
ZL4LT	Richards, F. B., 84 Onetaunga Road, Birkenhead, Auckland.1310
ZL4LU	Costard, T. J., 17 Stirling Street, Andersons Bay, Dunedin.9001
ZL4LV	Johnson, P. W., Saddle Hill Road, Fairfield, R.D. 1, Dunedin.9021
ZL4LW	Woodford, L. A., 90 Palmerston Street, Riverton.9654
ZL4LX	Evans, R. W., 558 Tay Street, Invercargill.9501
ZL4LY	Macaskill, D. J., 34 Stirling Street, Invercargill.9501
ZL4LZ	Telford, B., Ruru Avenue, Otatara, R.D. 9, Invercargill.9521
ZL4MA	Ferguson, T. R., 22 Turnbull Street, Invercargill.9501
ZL4MB	Andrews, S. E., 14 Como Street, Dunedin.9001
ZL4MC	McGowan, D. F., 7 Arthur Street, Oamaru.8901
ZL4MD	Hayes, K. J., Ripponvale Road, R.D. 2, Cromwell., P.O. Box 143, Cromwell.9191
ZL4ME	MacDonald, D. T., 155 Brockville Road, Dunedin.9001
ZL4MF	Bell, J. W., 66 Elizabeth Street, Invercargill.9501
ZL4MG	McKenzie, W. J., 115 Mcquarrie Street, Invercargill.9501
ZL4MH	McKenzie, E. D., 6 Drivers Road, Dunedin.9001
ZL4MI	Tidbury, S. J., Otakau Golf Course Road, Otakau.9521
ZL4MJ	Mitchell, J. S., 109 Layard Street, Invercargill.9501
ZL4MK	Kingston, R. W. G., 12 Kenilworth Street, Waverley, Dunedin.9001
ZL4ML	Lamont, M. S., 3 Garden Place, Glenleith, Dunedin.9001
ZL4MM	Murray, R. W., 101 Inniscort Street, Cromwell.9191
ZL4MN	Mosley, J. D., 67 Gladstone Road, Dunedin.9001
ZL4MO	Askey, A. J., 30 Murano Street, Waverley, Dunedin.9001
ZL4MP	Crichton, J., 14 Franklin Street, Dunedin.9001
ZL4MR	Mabon, A. C., 29 Crosby Street, Dunedin.9001
ZL4MS	Dalliessi, P. J. C., Chertsey Court, 217d Ruahine Street, Terrace End, Palmerston North., P.O.Box 5284, Palmerston North.5301
ZL4MT	Matthews, R. H., Main Road, Mokotua, R. D. 1, Invercargill.9521
ZL4MU	Cook, R. K., 230 Crawford Street, Invercargill.9501
ZL4MV	Dawson, G. L., 32 Vernon Street, Invercargill.9501
ZL4MW	Ward, W. T. R., West Plains Road, R.D. 4, Invercargill.9521
ZL4MX	Govan, W. A., 28 Ann Street, Dunedin.9001
ZL4MY	Treweek, M. E., 576 Herbert Street, Invercargill.9501
ZL4MZ	Sherlaw, W. G., Waipori Falls. 9150
ZL4NA	Dinkelaar, F., 48 Cranbrook Avenue, Christchurch.8005
ZL4NB	Barkman, D. J., 36 Walton Street, Kaikorai, Dunedin.9001
ZL4NC	Patterson, B. R., 66 Koremata Street, Dunedin.9001

ZL4ND	Cunninghame, P. J., 63 High Street, Mosgiel.9007
ZL4NF	Fox, R., 26 Sarajevo Place, Ranui, Auckland.1230
ZL4NH	McRodden, P., 93 Tomahawk Road, Andersons Bay, Dunedin.9001
ZL4NI	Braddock, A. R. (Mrs), 39 Norton Street, Gore.9700
ZL4NJ	Scott, I. R., 514 Yarrow Street, Invercargill.9501
ZL4NK	Kan, N. C. Y., 90 North Road, North East Valley, Dunedin.9001
ZL4NL	Taylor, A. J., 37 Dipton Street, Invercargill.9501
ZL4NO	Davidson, M., 7 Jack Street, Invercargill.9501
ZL4NP	Goodin, N. H., 325 Tomahawk Road, Dunedin.9001
ZL4NQ	Queenstown Branch 75 NZART, see Branch Directory
ZL4NR	McVie, K. R., 9 Davies Street, Concord, Dunedin.9006
ZL4NS	Hagen, R. L., 23 Milford Street, Invercargill.9501
ZL4NU	Mackay, A. J., Montana, 2 R.D., Heriot.9152
ZL4NV	Selwyn, T. A., 16 Victoria Street, Timaru.8601
ZL4NW	Lee, N. P. C., 51 Dome Street, Invercargill.9501
ZL4NX	Eteveneaux, D. H., 46 Greenock Street, Dunedin.9001
ZL4NZ	Reid, K. W., 7 Skye Street, Invercargill.9501
ZL4OA	McCutcheon, M. C., Littles Road, R.D. 1, Queenstown.9692
ZL4OC	Smith, R. F., 4 Spiers Road, Dunedin.9001
ZL4OD	Parsons, R. D., 69 Oreti Street, Invercargill.9501
ZL4OE	Cumming, C. T., 100 Doon Street, Waverley, Dunedin.9001
ZL4OF	Adams, C. A., 38 Warden Street, Opoho, Dunedin.9001
ZL4OH	McNeill, R. A., 27 Murphy's Road, Blenheim.7301
ZL4OI	Sim, R. J., Gordon Road, R.D. 2, North Taieri, Mosgiel.9032
ZL4OJ	Collie, D. B., 21 Avenal Street, Invercargill.9501
ZL4OL	McAlevey, M. J., Double Hill Road, Waitati.9160
ZL4OM	McIver, P. D., 10 Rata Drive, Otematata.8950
ZL4ON	Summerell, B. W., 457 Racecourse Road, Invercargill.9501
ZL4OO	Central Otago Branch NZART, see Branch Directory
ZL4OP	Morris, D. P., 134 Stobo Street, Invercargill.9501
ZL4OQ	Shore, B. F. (Mrs), 1 Upland Street, Dunedin.9001
ZL4OR	Reeves, W. A., 205 Tomahawk Road, Andersons Bay, Dunedin.9001
ZL4OS	Fleming, I. D., 43 Carnarvon Street, Invercargill.9501
ZL4OT	Smith, L. H., Waiwhenua, R.D. 9, Hastings.4221
ZL4OU	North Otago Branch NZART, see Branch Directory
ZL4OV	Major, L. H., 16 Maybank Street, Opoho, Dunedin.9001
ZL4OW	Vincent, S. V., 30 Charles Street, Weston, Oamaru.8901
ZL4OX	Checketts, R. N., 21 Highfield Terrace, Invercargill.9501
ZL4OY	Hannagan, C. C., 51 Plateau Road, Upper Hutt.6401
ZL4OZ	Adams, D. A., 47 Wray Street, Dunedin.9001
ZL4PA	Lamb, M. A., 90 Princes Street, Invercargill.9501
ZL4PB	Christie, D. A., 116 Birdwood Avenue, Beckenham, Christchurch.8002
ZL4PC	Haigh, F., c/- 99 Eglinton Road, Mornington, Dunedin.9001
ZL4PD	Neill, K. G., 38 Teignmouth Street, Green Island, Dunedin.9006
ZL4PE	Blyth, B. W., Price Road, Winton.9662
ZL4PF	Lindsay, M. G., c/- Wellington Radio, Private Bag, Wellington.6020
ZL4PG	Lloyd, D. A., 180 Forbury Road, Dunedin.9001
ZL4PH	Drayton, G. J., Lochiel, R.D. 1, Winton.9662
ZL4PI	Huband, G. J., 18 Norman Street, Dunedin.9001
ZL4PJ	Blain, W. A., 640 Tay Street, Invercargill.9501
ZL4PK	McLean, G. P., 87 Easther Crescent, Dunedin.9001
ZL4PL	Hutchings, T. J., 153 Leet Street, Invercargill.9501
ZL4PM	Marsh, P., 33 Falcon Street, Dunedin.9001
ZL4PN	Skeet, B. R., 123 Dunstan Road, R.D. 2, Alexandra.9181
ZL4PO	Price, L. J., 68 Matua Road, R.D. 9, Invercargill.9521
ZL4PP	Cairns, J. G., 35 Royal Terrace, Alexandra.9181
ZL4PQ	Pryde, G. W., 25 Brownville Crescent, Maori Hill, Dunedin.9001
ZL4PR	Russell, P. F., Bryson Road, Otatara, 9 R.D., Invercargill.9521
ZL4PS	Stonehouse, P. R., 70 Bamborough Street, Invercargill.9501
ZL4PT	Thompson, K. P., 180 Mornington Road, Dunedin.9001
ZL4PU	Watson, G. M., 4 H.R.D., Oamaru.8921
ZL4PV	Virtue, A. D. S., Shropshire Street, P. O. Box 18, Kingston.9660
ZL4PW	Stevens, C. A. (Mrs), 5 Lanes Road, Bridge Hill, Alexandra.9181
ZL4PX	McMillan, A. D. K., 22 Jameson Avenue, St Albans, Christchurch.8005
ZL4PY	Ball, G. L., 181 Albany Street, Dunedin.9001
ZL4PZ	Gilchrist, A. J. H., 20 Vogel Street, Hawera.4800
ZL4QA	Grieve, L. M., Kennington, 1 R.D., Invercargill.9521
ZL4QB	Grocott, R. F., 49 Holyoake Crescent, Lower Hutt.6301
ZL4QC	Walton, A. D., 132 Martin Road, Fairfield, Dunedin.9006
ZL4QD	Hand, K. A., 45 Aotea Street, Dunedin.9001
ZL4QE	Pearce, B. H., Dunvegan, Clinton.9251
ZL4QG	Nilson, F. E. G., 19 District Road, Roseneath, Sawyers Bay, Dunedin.9005
ZL4QH	Adams, R. J., 4a Wharfe Street, Oamaru.8901
ZL4QI	McDiarmid, K. G., 41 Towey Street, Oamaru.8901
ZL4QJ	Burtenshaw, J. S., 101 Tramway Road, Hamilton.2001
ZL4QK	Cross, A., 11 Ryehill Street, Calton Hill, Dunedin.9001
ZL4QL	Smithies, R. B., 2 Talbot Street, Invercargill.9501
ZL4QM	McLaren, J. B., 8 Marlborough Crescent, Richmond, Nelson.7001
ZL4QN	Bonney, J. E., 47 Seaward Road, Edendale.9752
ZL4QO	Lawson, D., 32 Saddle View Place, Fairfield, Dunedin.9006
ZL4QP	Harwood, P. J., 13 Hanson Street, Portobello, Dunedin.9004
ZL4QQ	Marshall, W. H., 39 Bellona Street, St. Kilda, Dunedin.9001
ZL4QS	Lochhead, J. R., "The Balloon", R. D. 1, Kaitangata.9253
ZL4QT	Donoghue, A. M., 439 Highgate, P. O. Box 6036, Dunedin.9030
ZL4QU	Piper, R. V., Drysdale Road East, R.D. 2, Myross Bush, Invercargill.9521
ZL4QV	Walsh, J. F., 38 Skibo Street, Kew, Dunedin.9001
ZL4QX	Logan, L. N., 18 Asquith Street, Caversham, Dunedin.9001
ZL4QY	Williams, J. W. L, 72 Russell Street, Alexandra.9181
ZL4RA	Drayton, M. J., Moores Road, R.D. 8, Invercargill.9521
ZL4RB	Naish, A. W., Kakanui, 5 R.D., Oamaru.8921
ZL4RC	Wekking, J. H. J., 38 Jollie Road, Twizel.8773
ZL4RD	Perrin, L. D., c/- 34 Hassall Street, Timaru.8601
ZL4RE	Murgatroyd, E. M., 97 Factory Road, Mosgiel.9007
ZL4RF	Osborne, H. F., 8 Conway Crescent, Invercargill.9501
ZL4RG	Calvert, K. C., P.O.Box 6055, Invercargill North.9530
ZL4RJ	Elliott, A. J., 175 Bourke Street, Invercargill.9501
ZL4RK	Simpson, I. E., 58 Price Street, Waikiwi, Invercargill.9501
ZL4RL	Chirnside, A. J., Flat 13, Dorset Towers, 8001
ZL4RM	Wijkstra, E., 28 White Street, Invercargill.9501
ZL4RN	Donoghue, A. M., 439 Highgate, P. O. Box 6036, Dunedin North.9000
ZL4RO	Graham, J. D., 212 Broughton Street, Gore.9700
ZL4RP	Gillions, R. M., 7 Maryport Street, Lawrence.9153
ZL4RQ	Pycroft, B. E., 261 Wellington Road, Wainuiomata.6305
ZL4RR	Moore, J. S. F., 49 Nelson Street, Dunedin.9001
ZL4RS	Jonker, J. A., 31 Burns Street, Milton.9254
ZL4RT	Smith, D. J., P.O.Box 435, Nelson.7000
ZL4RU	Powe, R. L., Horserange Road, Palmerston.9161
ZL4RV	Tamplin, A. F. K., 58 Cooper Street, Karori, Wellington.6005
ZL4RW	Bailey, W. D., 35 Tyne Street, Roslyn, Dunedin.9001
ZL4RX	MacDiarmid, R. M., 43 Cargill Street, Dunedin.9001
ZL4RY	Richardson, L. J., 87 Newcastle Street, Clyde.9180
ZL4RZ	Jardine, M. A., 153 Eden Street, Oamaru.8901
ZL4SA	Helm, P. D., 28 Stafford Street, Ranfurly.9171
ZL4SB	Stevenson, D. J., 10 Sutcliffe Street, Dunedin.9001
ZL4SC	Rait, M. P., Longwood, R.D. 1, Riverton.9654
ZL4SD	Excell, R. A., 144 Te Anau Terrace, Te Anau.9681
ZL4SE	Brannigan, A. M., c/- 18 Holyhead Street, Outram.9155
ZL4SF	Watt, B. F., 91 Weston Road, Oamaru.8901
ZL4SH	Orr, N. A., 3/4 Coronation Road, Glenfield, Auckland.1310
ZL4SJ	Bromley, I. J., 6 Homestead Road, Whangaparaoa.1463
ZL4SL	Pope, K., 171 Howick Road, Blenheim.7301
ZL4SM	Finer, W. R., 27 Divich Avenue, Te Atatu South, Auckland.1208
ZL4SN	McLeod, N. C., 65 Stuart Street, Oamaru.8901
ZL4SO	Ellis, K. M., 3 Hawera Road, Kohimarama, Auckland.1105
ZL4SQ	Leadley, A. M., Mangaotaki Road, Piopio.2555
ZL4SR	Fletcher, R. E., 19 Riverside Drive South, Lower Hutt.6301
ZL4SS	Jury, L. S., 20 Whenua View, Titahi Bay.6202
ZL4ST	Beveridge, G. W., 83 Russell Street, Alexandra.9181
ZL4SU	Murrell, I. G., 65 King Street, Te Kuiti.2500
ZL4SV	Hayter, J. W., 22 Omapere Road, Kaikohe.0400
ZL4SW	Hodgson, B. J., 171 North Road, Dunedin.9001
ZL4SX	Lovatt, D. J., 23a Janet Place, Rotorua.3201
ZL4TA	Millar, G. E., 18a Arun Street, Oamaru.8901
ZL4TB	Campbell, A. J. N., Myross Road, R.D. 6, Invercargill.9521
ZL4TF	Wallace, J. M., 95 Chelmsford Street, Invercargill.9501
ZL4TH	Sloan, B. H., 10/146 Kew Road, Invercargill.9501
ZL4TJ	Ellenden, E., 37 Carron Street, Invercargill.9501
ZL4TM	Gorton, W. J., Orion Road, Makarewa.9660
ZL4TN	Browne, D. J., 23 Hayle Street, Oamaru.8901
ZL4TO	Mann, I. A., 72 Greig Street, Broad Bay, Dunedin.9004
ZL4TP	Garry, A. M., 4 Tilburn Street, Halfway Bush, Dunedin.9001
ZL4TQ	Sum, D. A., 44 Adelaide Street, Petone.6303
ZL4TR	Armstrong, E. W., 15 London Street, Weston, North Otago.8901
ZL4TS	Smith, J. W., R.D. 1, Newhaven, Owaka.9255
ZL4TV	Adamson, A. T., 311 Pine Hill Road, Liberton, Dunedin.9001
ZL4NAB	Clapham, E. S., 31 Ronaldsay Street, Palmerston.9161
ZL4NAJ	Johnston, N. A., Blue Cliff Station, R.D. 24, St Andrews, Dunedin.9021

ZL4TAA	Woods, A. M., 5 Beaumont Road, Dunedin.9001
ZL4TAB	Olsen, W. J., 11 Estuary Crescent, Fairfield, Dunedin.9006
ZL4TAC	Parish, D. A., 25 Truscot Avenue, Johnsonville, Wellington.6004
ZL4TAD	Wilhelmson, G. R., 24 Aberdeen Road, St. Clair, Dunedin.9001
ZL4TAE	Thomas, T. M., 105 Larnach Road, Dunedin.9001
ZL4TAG	Enright, A., 22 Main Road, Waldronville, Dunedin.9006
ZL4TAH	Checketts, G. N., 21 Highfield Terrace, Invercargill.9501
ZL4TAI	Calder, A. D., Ardgowan, R.D. 10, Oamaru.8921
ZL4TAJ	Paterson, E. G., Waianiwa, R.D. 4, Invercargill.9521
ZL4TAK	Bowen, D. J., 9c Ravelston Street, Dunedin.9001
ZL4TAL	Russell, N., 3/156 Salford Street, Invercargill.9501
ZL4TAM	Mamadjianian, A. P., 413 Centre Street, Invercargill.9501
ZL4TAN	Kramer, K. H., 82 Russley Road, Christchurch.8004
ZL4TAO	Hetherington, M. B., 36 Mary Street, Invercargill.9501
ZL4TAP	Johnston, G. H. L., 230 Talbot Street, Invercargill.9501
ZL4TAQ	Howell, A. D., 18 Beverley Street, Merivale, Christchurch.8001
ZL4TAR	Kirkby, K. J., 5 Lesney Street, Dunedin.9001
ZL4TAS	Doak, D. E., 205 Princes Street, Invercargill.9501
ZL4TAU	Richards, O. C., 31 Maitland Street, Dunedin.9001
ZL4TAV	Gordon, G. P. C., 9 Salmond Street, Dunedin.9001
ZL4TAX	Checketts, C. M., 21 Highfield Terrace, Invercargill.9501
ZL4TAY	Field, E. T., 192 Lagan Street, Bluff.9503
ZL4TAZ	Wade, R. B., 25 Rewa Street, Sunshine, Dunedin.9001
ZL4TBA	Croy, P. R., R. D. 2, Challis Point, Dunedin.9001
ZL4TBB	Sapwell, H. W. D., 4 McDonald Street, Dunedin.9001
ZL4TBC	Fischer, F. J., 133 Marama Avenue North, Otatara, Invercargill.9521
ZL4TBD	Puklowski, N. A., 127 North Street, Ashhurst.5451
ZL4TBE	Hurley, D. J., 8 President Avenue, Papakura.1703
ZL4TBF	McNamara, B. R., Lauder, R.D. 2, Oamaru.8921
ZL4TBI	Thompson, E. R., 119 Kapu Road, Paramata.6250
ZL4TBL	MacDonald, C. S., 50 Dunlop Street, Wallacetown, Invercargill.9501
ZL4TBM	Bayne, A. R., 49 O'Byrne Place, Invercargill.9501
ZL4TBN	Nelson, D. A., 23 Grant Dalton Drive, Taieri Airport, Mosgiel.9007
ZL4TBO	Stewart, E. A., Main Road, Kuri Bush, Brighton.9151
ZL4TBP	Staite, G. T., 8 Forfar Street, Mosgiel.9007
ZL4TBR	Cleaver, R. A. J., 97 Robertson Street, Gore.9700
ZL4TBS	Anderson, M. H., 28 Thompson Street, Queenstown.9692
ZL4TBV	Wilson, P. W. R., 236 Taieri Road, Dunedin.9001
ZL4TBY	Reid, D. R., 8 Manse Street, Waimate.8791
ZL4TBZ	Mason, K. A., 41 Jennifer Street, Christchurch.8005
ZL4TCA	Griffith, I. W., 17 Gilmore Street, Dunedin.9001
ZL4TCB	Walker, B. A., Goodwood Road, R.D. 1, Palmerston.9161
ZL4TCC	Le Quesne, P. W. H., 23 Oriel Place, Pirimai, Napier.4001
ZL4TCD	Todd, R. J., Naumai Street, Gore.9700
ZL4TCE	Wilkins, R. J., Allans Beach Road, Portobello.9004
ZL4TCF	Norgrove, T. J., 9 Dakota Place, Waldronville, Dunedin.9006
ZL4TCI	Barker, B. B., Larnach Castle, Dunedin.9001
ZL4TCJ	Wagener, A. R., c/- R. D. Wagener, Main Road, R.D. 4, Kaitaia.0500
ZL4TCK	Mawby, D. J., 4 Claremont Avenue, Chartwell, Hamilton.2001
ZL4TCL	Allan, G. L., 7 Princess Street, Marton.5151
ZL4TCM	Ireland, B. D., 482 Thames Highway, Oamaru.8901
ZL4TCN	Holley, J. A. C., 44 Scotland Street, Roxburgh.9156
ZL4TCO	Mooney, W. J., 21 Greenhill Avenue, Dunedin.9001
ZL4TCP	Tarlton, A. I. G., c/- C. W. Allen, Main Road, R.D. 1, Broadwood.0553
ZL4TCR	Beadle, A. J., 9 Kilgour Street, Dunedin.9001
ZL4TCS	Falconer, E. F., Whiterig, Gore.9700
ZL4TCT	Sinclair, R. W., 70 Lorn Street, Invercargill.9501
ZL4TCU	Phelvin, K. W., 22 Bourbon Terrace, Karori, Wellington.6005
ZL4TCV	Nixon, D. B., 2/171 River Road, Richmond, Christchurch.8001
ZL4TCW	Smith, A., 64 Dome Street, Invercargill.9501
ZL4TCX	Grieve, R. J., 56 Cargill Street, Invercargill.9501
ZL4TCY	Childs, P. B., 17 Duckworth Street, Dunedin.9001
ZL4TCZ	Gollop, P. J., 2/71 Melbourne Street, Invercargill.9501
ZL4TDA	Clearwater, B. G., 36 King Street, Mosgiel.9007
ZL4TDB	Wilden, J. H., 46 Hocken Street, Dunedin.9001
ZL4TDD	Fischer, P. J., 133 Marama Avenue North, Otatara, Invercargill.9501
ZL4TDE	Gallagher, P. R., 112 John Sims Drive, Johnsonville, Wellington.6004
ZL4TDF	Walker, J. D., 7 Meon Street, Oamaru.8901
ZL4TDG	Webber, R. J., 42 Ryehill Street, Dunedin.9001
ZL4TDI	Bowen, P. D. O., 207 Taieri Road, Dunedin.9001
ZL4TDJ	Dingwall, A. B., 47 Gilkison Street, Dunedin.9001
ZL4TDK	Dwyer, W. A., 21 Summertime Avenue, Dunedin.9001
ZL4TDL	Jones, I. E., P. O. Box 295, Mosgiel.9032
ZL4TDM	Laurie, C. S., 43 Dunbarton St., Christchurch.8005
ZL4TDN	Garry, N. A., 27 Salmond Street, Dunedin.9001
ZL4TDO	Cathro, S. G., 6 Gala Street, Dunedin.9001
ZL4TDP	Aronsen, P. G., 10 Girvan Street, Wallacetown, Invercargill.9502
ZL4TDQ	Davidson, R. W., 251 Pomona Street, Invercargill.9501
ZL4TDR	Zoest, A. R., 116 Evans Street, Dunedin.9001
ZL4TDS	King, W. A., R.D. 2, Millers Flat.9154
ZL4TDT	Johnson, W. A., 16 Herbert Street, Gore.9700
ZL4TDU	Lynn, I. G., 26 Larkin Street, Dunedin.9001
ZL4TDX	McAllum, H. J. F., 32a Wroxton Terrace, Fendalton, Christchurch.8001
ZL4TDZ	Duffy, K. J., 50 Catherine Street, Invercargill.9501
ZL4TFC	Thayer, M. P., 24 Chisholm Place, Dunedin.9001
ZL4TFD	Ball, D. R., 2c Towey Street, Oamaru.8901
ZL4TFF	Bokser, D. L., 3 Earn Street, Oamaru.8901
ZL4TFG	Neill, P. G., 38 Teignmouth Street, Green Island, Dunedin.9006
ZL4TFH	Allen, M. F., 36 Barclay Street, Dalmore, Dunedin.9001
ZL4TFI	Brodie, J. T., 31 Clifford Street, Dunedin.9001
ZL4TFJ	Shirreffs, C. S., 145 Scandrett Street, Invercargill.9501
ZL4TFK	Fletcher, R. F., 9 Benhar Street, Dunedin.9001
ZL4TFL	Collier, J. B., 86 Mailer Street, Mornington, Dunedin.9001
ZL4TFP	Bedford, W. M., c/- Milburn Gardens, R.D. 2, Milton.9254
ZL4TFR	Waters, J. L., P.O. Box 11, Kingston, Southland.9660
ZL4TFV	Calder, D. G., 6 Union Street, Winton.9662
ZL4TFW	Gamble, A. A., Oakdale, R.D. 1, Takahue, Kaitaia.0500
ZL4TFY	Craighead, G., 162 Balmacewen Road, Dunedin.9001
ZL4TGA	Scott, P. R., 99 Gilkinson Street, Dunedin.9001
ZL4TGB	Grant, W. A., 7 Lochend Street, Dunedin.9001
ZL4TGC	Bowie, D. R., 302 Main Road, Green Island, Dunedin.9006
ZL4TGD	Downey, B. T., Portobello Road, Vauxhall, Dunedin.9001
ZL4TGF	Williams, G. B., 64 Forfar Crescent, Invercargill.9501
ZL4TGG	Keen, R. G., 274 Highcliff Road, Andersons Bay, Dunedin.9001
ZL4TGH	Connolly, R. C., Blueskin Road, R.D. 1, Port Chalmers.9005
ZL4TGJ	Pettigrew, A. D., 384 McQuarrie Street, Invercargill.9501
ZL4TGL	Smith, R. A. J. A., 50 Dryden Street, Milton, South Otago.9254
ZL4TGM	Black, W. A., 49 Royal Terrace, Dunedin.9001
ZL4TGN	Nisbet, R. A., 123 Milton Street, Christchurch.8002
ZL4TGP	Watson, R. M., 21 Arcus Street, Whangarei.0101
ZL4TGQ	Andrews, B. D., 14 Como Street, Dunedin.9001
ZL4TGR	Watson, D. K., 114 Cannington Road, Maori Hill, Dunedin.9001
ZL4TGS	Faulkner, D. L., 34 Clifden Road, Tuatapere.9655
ZL4TGT	Gerrie, A. L., 105 Riselaw Road, Calton Hill, Dunedin.9001
ZL4TGV	Allan, R. P., 29 Venus Street, Invercargill.9501
ZL4TGW	McGregor, T. R., 11b Allendale Road, Dunedin.9001
ZL4TGY	Parris, R. C., 57 Rata Drive, Otematata.8950
ZL4TGZ	Paterson, S. L.(Mrs), "Waianiaw", R.D. 4, Invercargill.9521
ZL4THA	Hall, S. J., 2 Sutcliffe Street, St Clair, Dunedin.9001
ZL4THC	Andrews, J. W. A., 65 Stuart Street, Invercargill.9501
ZL4THE	Booth, A. W., 6 Essex Street, Balclutha.9200
ZL4THF	Burge, G. G., 12 Pederson Place, Bucklands Beach, Auckland.1704
ZL4THG	McAuliffe, K. J., 184 Morton Street, Invercargill.9501
ZL4THH	Searle, J., 22 Chisholm Place, Andersons Bay, Dunedin.9001
ZL4THI	Christie, A. R., 9 Koremata Street, Green Island, Dunedin.9006
ZL4THJ	Rabbidge, M. J., "Crayburn", No. 1 R.D., Tokanui, Southland.9671
ZL4THK	Sinclair, D. H., 8 Argyle Street, Weston, Oamaru.8901
ZL4THL	Davidson, R. J., Earnscleugh Road, Clyde.9180
ZL4THN	Hannah, I. R., 34 Statham Street, Dunedin.9001
ZL4THO	Larsen, S. N., 108 Rosebank Avenue, Wakari, Dunedin.9001
ZL4THP	Da-Rin, K. J. V., 36 South Road, Dunedin.9001
ZL4THQ	Crimp, G. R., 31 Davies Road, New Plymouth.4601
ZL4THR	Spence-Ord, K. D., 18 Ash Street, Oamaru.8901
ZL4THS	O'Cain, P. J., 394 Nees Street, Invercargill.9501
ZL4THT	Blee, A. R., 7 Campbell Street, Alexandra.9181
ZL4THV	Stevens, D. B., 52 Newby Street, Invercargill.9501
ZL4THX	Cleland, M. J., 38 Ahyle Street, Oamaru.8901
ZL4THY	Englefield, B. R., 7 Taylor Avenue, Motueka.7161
ZL4THZ	McLean, C. J., Longbush, R. D. 1, Invercargill.9521
ZL4TIA	Larsen, C. M., 108 Rosebank Street, Wakari, Dunedin.9001
ZL4TIB	Wallace, W. D., 17 Delphic Street, Sawyers Bay, Dunedin.9008
ZL4TIC	Stewart, C. H., 29 Paisley Place, Invercargill.9501
ZL4TID	McRae, G. F., 1 Hillcrest Avenue, Mataura.9753
ZL4TIE	Barber, B. J., "Glencoe", R.D. 2, Invercargill.9521
ZL4TIG	Hill, A. R. M., 16 Wyre Street, Kaitangata.9253
ZL4TIH	Jackson, G. A. G., 23 Naish Street, Balclutha.9200

ZL4TII Pierson, W. E., 16 Naish Street, Balclutha.9200
ZL4TIK Curline, A. J., 151 Tennyson Street, Dunedin.9001
ZL4TIL Drage, I. J., 171 Morton Street, Invercargill.9501
ZL4TIM Watson, N. R., 59 Rountree Street, Christchurch.8004
ZL4TIN Murdoch, G. N., Mototua, R.D. 11, Invercargill.9521
ZL4TIO Moore, J. S., 10 Dalrymple Street, Dunedin.9001
ZL4TIP Dupont, C. C., 6 Lothian Crescent, Invercargill.9501
ZL4TIQ McLaren, G. D., 12 Douglas Street, Wakatipu.9690
ZL4TIR Woodrow, P. J., 32 Baker Street, Stirling, South Otago.9256
ZL4TIS Williams, A. R., 26 Centre Street, Invercargill.9501
ZL4TIW King, D. J., 48 Forfar Street, Mosgiel.9007
ZL4TIY Larooy, G. M., 617 York Street, Hastings.4201
ZL4TIZ Thomson, A. A., 3 Shirley Place, Dunedin.9001
ZL4TJA Boshier, S. W., 14 Pethig Place, Christchurch.8003
ZL4TJB McCall, D. A., c/- A. G.McCall, 42 Filleul Street, Invercargill.9501
ZL4TJC Cavanagh, D. B., 74 Koa Street, Gore.9700
ZL4TJD Williamson, P. B. A., Flat G, Austen Court, 82 Forth Street, Dunedin.9001
ZL4TJE Townsend, A. A., 179 Newlands Road, Newlands, Wellington.6004
ZL4TJH Balch, R. M., 23 Connell Street, Dunedin.9001
ZL4TJJ Meyer, L., 43 Arawa Street, Dunedin.9001
ZL4TJK King, A. E. J., Kaka Point, R.D. 1, Balclutha.9200
ZL4TJL Maley, G. K., 127 Ritchie Street, Invercargill.9501
ZL4TJM Fleury, B. R., 30 Ventnor Street, Dunedin.9001
ZL4TJN Peirson, J. R. W., 34 Gladstone Road, Dunedin.9001
ZL4TJO Blair, J. G. H., 5 Merrie Creek Road, Clinton.9251
ZL4TJP Askin, F. A., Neath Street, Moeraki.8950
ZL4TJR Smither, M. E., 210 Brockville Road, Dunedin.9001
ZL4TJS Holland, B. J., c/- Police Station, Waikari.8276
ZL4TJT Holland, J. P., Otago Yacht Club, Dunedin.9001
ZL4TJW Anderson, R. J., 3 Cross Street, Oamaru.8901
ZL4TJX Nicholls, M. A., 12 Salisbury Road, Richmond, Nelson.7002
ZL4TJY Currie, M. R., 15 Ferry Street, Wyndham.9758
ZL4TJZ Taylor, A. J., 75 Eddystone Street, Kaitangata.9253
ZL4TKC Greenwood, T. N., Marama Avenue South, Otatara, R.D. 9, Invercargill.9521
ZL4TKD Anderson, M. L., 141 Catherine Street, Invercargill.9501
ZL4TKF Kent, A. W., 101 Richmond Street, Petone, Wellington.6303
ZL4TKH Turner, K. F. M., "Waimatuku", 8 R.D., Invercargill.9521
ZL4TKK Spence, R. W., 343 Herbert Street, Invercargill.9501
ZL4TKM Mitchell, G. D., 19 Ascog Road, Ravensbourne, Dunedin.9002
ZL4TKN Harvey, B. J., 26 Carson Street, Mornington, Dunedin.9001
ZL4TKP Hogg, G. M., 6 Michie Street, Bellknowes, Dunedin.9001
ZL4TKQ Tamplin, N. L. A., 58 Cooper Street, Karori, Wellington.6005
ZL4TKS Mason, E. C., 16 John Street, Ranfurly.9171
ZL4TKT Doak, N. L., 205 Princes Street, Invercargill.9501
ZL4TKU McLean, G. W., 102 Ravelston Street, Dunedin.9001
ZL4TKZ Austin, T. D., 19 Flagstaff Road, Bluff.9503
ZL4TLA MacArthur, P. J., 52 Salmond Street, Dunedin.9001
ZL4TLB Rae, B. G., 8 Brent Street, Dunedin.9001
ZL4TLC Brundell, J. B., 164 Gladstone Road, Mosgiel.9007
ZL4TLD Dunn, G. G., 27 Northfield Avenue, Dunedin.9001
ZL4TLE Elliott, L. G., 36a Murano Street, Dunedin.9001
ZL4TLF Osborne, K. F., Milburne, R.D., Milton.9254
ZL4TLG McConechy, G. S., 71 Heywood Street, Invercargill.9501
ZL4TLI Wright, D. W., 309 Talbot Street, Invercargill.9501
ZL4TLK Matthews, T. L., Main Road, Mokotua R.D. 1, Invercargill.9521
ZL4TLL Blair, R. C. W., Taumata, R.D., Clinton.9251
ZL4TLN Taylor, B. H., 75 Eddystone Street, Kaitangata.9253

New Zealand Radio Frequency Service Offices

- All amateur radio licencing matters.

Office	Delivery Address	Postal Address	Telephone No
Head Office	Ministry of Commerce Building, 33 Bowen Street, WELLINGTON	P.O. Box 2847	(04) 732-200
Whangarei	National Mutual Building, Rathbone Street, WHANGAREI	P.O. Box 449	(089) 488-491
Auckland	Altos House, Cnr Newton Road and Abbey Street, Newton, AUCKLAND	P.O. Box 68-217	(09) 788-537
Hamilton	512 Grey Street, HAMILTON	P.O. Box 982	(071) 387-150
Tauranga	Departmental Building, McLean Street, TAURANGA	P.O. Box 847	(075) 799-229
Rotorua	Government Life Building, 9 Haupapa Street, ROTORUA	P.O. Box 847	(073) 460-370
Gisborne	New Zealand Post Building, Grey Street, GISBORNE	P.O. Box 339	(079) 78-424
Napier	First Floor, Manchester Unity Building Cnr Kennedy Road and Nuffield Avenue, Marewa, NAPIER	P.O. Box 4162 Marewa	(070) 435-829
New Plymouth	Cnr Liardet and Pendarves Streets, NEW PLYMOUTH	P.O. Box 217	(067) 88-139
Palmerston North	First Floor, 328-330 Broadway Avenue, PALMERSTON NORTH	P.O. Box 5063	(063) 66-710
Wellington	70 Bloomfield Terrace, LOWER HUTT	P.O. Box 31-433	(04) 665-537
Nelson	First floor, Farm Products, 42 Halifax Street, NELSON	P.O. Box 997	(054) 82-446
Greymouth	Post Office Building, Tainui Street, GREYMOUTH	P.O. Box 442	(027) 80-312
Christchurch	St. Elmo Courts, 47 Hereford Street, CHRISTCHURCH	P.O. Box 1800	(03) 654-401
Timaru	Room 102, First Floor, Railway Station, Station Street, TIMARU	P.O. Box 589	(056) 48-120
Dunedin	12 Hanover Street, DUNEDIN	P.O. Box 5647 MORAY PLACE	(024) 771-125
Invercargill	Post Office Building, 13 Esk Street, INVERCARGILL	P.O. Box 247	(021) 44-952

New Zealand Dependencies
ZL5, 6, 7, 8, 9, 0

ZL5
Antarctica

ZL5ATP	Pringle, A. T., C/- DSIR, Scott Base, Antarctica.

ZL6
NZART

ZL6A	New Zealand Association of Radio Transmitters (Inc.), PO Box 40-525, Upper Hutt.
ZL6E	AREC Master Station.
ZL6IW	NZART Monitoring Service, C/- R. E. Knowles ZL1BAD, Onewhero, RD 2, Tuakau.

ZL7
Chatham Islands

ZL7TZ	Rio, N. N., Tuku Road, Waitangi.
ZL7BJE	Day, S. M., PO Box 175, Waitangi.
ZL7NAA	Wyld, J., "Glory", Pitt Island.
ZL7TKI	Sanson, I. M., PO Box 65, Waitangi.
ZL7TPP	Locke, S., Radio Station, Waitangi.

ZL8
Kermadec Islands

ZL9
Auckland and Campbell Islands

ZL0
Overseas Visitors

ZL0 . . .

South Pacific Amateur Radio Listings

Tonga

A35AA	Straw, C. M., Paradise Hotel, Vava'u.
A35AI	Macgillivray, Alastair J., PO Box 15, Nuku'alofa.
A35AR	Doi, Y., Kimiko Guest House.
A35BG	Tapio, B. R., Phoenix Motel.
A35CE	Moehringer, H., Beach House.
A35CH	Hohenwallner, Ing, C., Kimiko Guest House, Nuku'alofa.
A35CX	Johnson, W. A., PO Box 263, Nuku'alofa.
A35DM	Martens, D., Yacht *Hic.*
A35DP	Nakamata, T., Kimiko Guest House.
A35DX	Peter, H., Beach House Nuku'alofa.
A35EK	Kusterer, M. E., MV *Doulos.*
A35EM	Toyofuku, S., Kimiko Guest House.
A35HK	Kitayama, H., Kimiko Guest House.
A35HN	Hama Na'ati (President), PO Box 46, Nuku'alofa.
A35IC	Miyazaki, J., Kimiko Guest House.
A35JZ	Zinsmeyer, J. M., Yacht *Menehune.*
A35KB	Burke, K., Longoteme, PO Box 1.
A35KD	Orlosky, K. T., Nuku'alofa.
A35KG	Gerhard, K., Sopu, Nuku'alofa.
A35KH	Klaas, H., MV *Doulos.*
A35LF	Lemeki, Malu, PO Box 46, Nuku'alofa.
A35LM	Macmillan, L. A., 15 Godden Crescent, Mission Bay, Auckland.
A35MB	Burch, M. A., Yacht *Ngaio.*
A35ML	Lehtosaari, M., Ramanlal Hotel.
A35MP	Potts, M. D., PO Box 30, Neiafu, Vava'u.
A35MR	Smith, J. B., Yacht *M. Reef.*
A35MS	Schuster, Manfred, (Secretary), Tofoa Tongatapu.
A35OQ	Nordlund, L. E., Hill Top Hotel, Vava'u.
A35PL	Schwarzkredl, P., Paradise Hotel, Vava'u.
A35RV	Munt, Robert B., Nuku'alofa.
A35RW	Weaver, R. G., Dateline Hotel, Nuku'alofa.
A35SA	Moore, R. J. (Treasurer), Nuku'alofa.
A35SK	Thunstrom, Alf, R., Neiafu Vava'u.
A35ST	Thompson, S. J., Yacht *Cannilie.*
A35UF	Schmidt, U., Beach House.
A35VB	Ilmari, N. V., Phoenix Motel.
A35VZ	Zinsmeyer, V. J., Yacht *Menehure.*
A35WI	Cartwright, C. C., Nuku'alofa.
A35WR	Rogan, Warren R., Vessel *Antares.*
A35XX	Brenner, W., Friendly Island Motel.
A35YO	Hashimoto Yoji, Kimiko Guest House.

Cook Islands

ZK1AA	Kingan, S., PO Box 66, Rarotonga.
ZK1AD	Dean, A., PO Box 259, Rarotonga.
ZK1AH	Hosking, A. V., PO Box 459, Rarotonga.
ZK1AN	Davis, Sir Thomas, PO Box 116, Rarotonga.
ZK1AQ	Malcolm, R., Atiu Island.
ZK1AR	Darling, R. S., Rarotonga.
ZK1BB	Cook Islands Boys Brigade, C/- ZK1AD, PO Box 259, Rarotonga.
ZL1BP	Savage H., PO Box 168, Rarotonga.
ZK1BS	Boy Scouts, PO Box 120, Rarotonga.
ZK1BW	Walters, B., Tupapa, Rarotonga.
ZK1CG	Rivera, V., PO Box 618, Rarotonga.
ZK1CI	Cook Islands Amateur Radio Club, PO Box 277, Rarotonga.
ZK1CL	Scheel, K. E., Titikaveka, Rarotonga.
ZK1CP	Utanga, T., PO Box 98, Rarotonga.
ZK1CQ	Wright, R., QSL via ZL1AMO.
ZK1CS	Swaboda, W., PO Box 19, Rarotonga.
ZK1CT	Guinea, Dr A., Mauke Island, CI.
ZK1CX	Pearson, N., PO Box 15, Rarotonga.
ZK1CY	Tupou, T., PO Box 209, Rarotonga.
ZK1DB	Gibbons, A., PO Box 277, Rarotonga.
ZK1DD	Clarke, D. J., Aitutaki Island, CI
ZK1DG	Godger, J. Rarotonga.
ZK1DQ	Lang, B., Rarotonga.
ZK1MA	Tupou, T., C/- ZK1CY, Rarotonga.
ZK1MG	Gladding, M., PO Box 709, Rarotonga.
ZK1NT	Tangaroa, N., PO Box 126, Rarotonga.
ZK1RS	Sutton, J. R., Rarotonga.
ZK1TB	Wilhelm, L. L., W7TB, USA.
ZK1TW	Wichman, T., PO Box 129, Rarotonga.
ZK1WL	Latham, W., Penrhyn Island, CI.

Fiji

3D2AA	Aisake, A., PO Box 4969, Suva.
3D2AG	de Ramon, A., PO Box 14633, Suva.
3D2AJ	McIssac, A. J., PO Box 425, Suva.
3D2AN	Wooler, M. J., St Johns College, Cawaci, Levuka.
3D2BC	Caldwell, B. K., PO Box 15349, Suva.
3D2CC	Carter, T. F., Muscat Cove Resort.
3D2CM	Northcott, R. L., PO Box 1168, Suva.
3D2CS	Broadbridge, E. K., PO Box 1046, Suva.
3D2CT	Jinenez, C. T., PO Box 567, Suva.
3D2DB	Banks, D. D., PO Box 13884, Suva.
3D2DM	Meyers, D. D., PO Box 184, Suva.
3D2DW	Olley, D. W. W., PO Box 238, Suva.
3D2EC	Corner, R. E., Wakaya Island.
3D2ER	Singh, Raj, GPO Box 184, Suva.
3D2ES	Saphore, E., UN Mineral Res. Dept., Suva.
3D2FK	Kloss, F. R., PO Matei, Taveuni.
3D2GH	George, J. H., PO Box 3126, Lami.
3D2GR	Clark, G. R., Private Mailbag, Nadi Airport.

3D2JC	Caldwell, J. D., PO Box 184, Suva.
3D2JO	Turaganivalu, J., 14 Alexander Street, Suva.
3D2JN	Nicol, J. W., Westpac, Suva.
3D2MP	Prakash, M., PO Box 5324, Raiwaqa.
3D2MR	Mar, G., PO Box 271, Suva.
3D2NB	Harding, F. W., Carpenters Shipping, Suva.
3D2PO	Doncaster, N. I. C., PO Box 184, Suva.
3D2PS	Schulz, A. F. P., PO Box 5372, Raiwaqa.
3D2RA	Allan, P. R., PO Box 631, Suva.
3D2RP	Prasad, R., PO Box 1267, Labasa, Fiji Islands.
3D2SS	First Suva Scout Group, Box 2344, Government Buildings, Suva.
3D2UR	USP Amateur Radio Club, Box 1168, Suva.

Niue

ZK2GJ	Jackson, G., PO Box 37, Niue Island.
ZK2JD	Duncan, J., PO Box 37, Niue Island.
ZK2JT	Thompson, J. J., PO Box 37, Niue Island.

Vanuatu (no update received for 1990)

YJ8AA	Tsuda, Y., C/- PO Box 665, Port Vila, Efate Island.
YJ8AP	Poulet, A., C/- PO Box 665, Port Vila, Efate Island.
YJ8DE	Discombe, R., PO Box 56, Port Vila, Efate Island.
YJ8DX	Vanuatu Amateur Radio Society, Vila Club, PO Box 665, Port Vila, Efate Island.
YJ8EK	Kumon, E., PO Box 1016, Port Vila, Efate Island.
YJ8ES	Vanuatu Amateur Radio Society, Santo Club, C/- VARS, PO Box 665, Port Vila, Efate Island.
YJ8FB	Beardsley, F., PO Box 16, Port Vila, Efate Island.
YJ8GG	Grihault des Fontains, G., PRV, Malekula.
YJ8GK	Kumon, G., PO Box 1016, Port Vila, Efate Island.
YJ8GP	Pearl, S., PO Box 623, Port Vila, Efate Island.
YJ8IND	Independence Day (Special Event), C/- VARS, PO Box 665, Port Vila, Efate Island.
YJ8JS	Shackley, N. J., C/- PO Box 665, Port Vila, Efate Island.
YJ8JT	Laille, G., PO Box 423, Port Vila, Efate Island.
YJ8KB	Barlow, A. K., PO Box 730, Port Vila, Efate Island.
YJ8MC	Mariello, M., C/- PO Box 665, Port Vila, Efate Island.
YJ8NBA	Armstrong, B., PO Box 873, Port Vila, Efate Island.
YJ8NCF	Foote, C. L., PO Box 14, Luganville, Espiritu Santo.
YJ8NJW	Watson, J. E., PO Box 683, Port Vila, Efate Island.
YJ8NRL	Leong, R., PO Box 50, Port Vila, Efate Island.
YJ8NRM	MacDonald, R., PO Box 535, Port Vila, Efate Island.
YJ8NRN	Newell, R. S., C/- PO Box 665, Port Vila, Efate Island.
YJ8OK	Watson, T. L., PO Box 683, Port Vila, Efate Island.
YJ8YS	Yatuka, S., C/- PO Box 665, Port Vila, Efate Island.

Solomon Islands

H44GP	Pearson, G., PO Box 292, Honiara.
H44GR	Richardson, G., PO Box 127, Honiara.
H44MB	Bowman (Capt.), M., PO Box G32, Honiara.
H44RA	Alexander, R., PO Box 332, Honiara.
H44SH	Honeysett, S., PO Box 620, Honiara.
H44SI	Solomon Island Radio Society, PO Box 418, Honiara.

New Caledonia

FK0BE	Galineau, Charles, Caserne Normandie, Box 12, Noumea.
FK0BH	Simplot, Patrick, Box 4681, Noumea.
FK0BI	Aime, Georges, Caserne Normandie, Box 12, Noumea.
FK0BJ	Cannell, Bernard, Caserne Meunier, Box 12, Noumea.
FK0BK	Martin-Latour, Yves, Box 301, Tontouta.
FK0BL	Rysdyk, Peter, C/- Follenfant, Box 2, Ile des Pins.
FK0BM	Barbaza, Jean, 138 Rte de l'Anse Vata, Noumea.
FK0BN	Bernard, Philippe, Box 257, La Foa.
FK0BO	Cazenuve, Bernard, Box 12, Noumea.
FK1RF	Chardola, Jean-Claude, Box 3111, Noumea.
FK1RI	Kryger, Monique, 21 rue Charbonneau, Noumea.
FK1RK	Amat, Gerard, 30 rue E. Sphar, Noumea.
FK1RN	Hervais, Francisque, 36 Lot Lafleur Nondoue, Dumbea.
FK1RO	Szymanski, Pascal, 193 RT 13, Box 544, Noumea.
FK1RP	Roussel, Jean-Yves, 2 rue Sirius, Noumea.
FK1RR	Miossec, Gil, 19 rue Janisel, Noumea.
FK1RS	Gallois, Jean-Pierre, 7 rue Calimbre, Noumea.
FK1RU	Mignot, Jean-Pierre, Box 90, Bourail.
FK1RX	Ollivaud, Jean-Yves, 59 rue G. Laroque, Noumea.
FK1RY	Devaut, Christian, Box 1260, Noumea.
FK1SA	Chevalier, Jacques, 70 rue G. Laroque, Noumea.
FK1SC	Fere, Gaetane, 8 rue du Jura, Noumea.
FK1SF	Limousin, Claude, 18 rue Bouquet de la Cyre, Noumea.
FK1SG	Forzy, Michael, 27 rue de la Gazelle, Noumea.
FK1SU	Esposito, Eric, 4 rue Ronsard, Box 4480, Noumea.
FK1TG	Roussel, Odile, Hauts du Val Plaisance, Noumea.
FK1TK	Rainer, Henri, 190 rue Boutmy, Box 4608, Noumea.
FK1TS	Hardstaff, Phillip, Box 3956, Noumea.
FK8AF	Guerlain, Georges, Ouenghi, Bouloupari.
FK8AH	Garbe, Robert, Box 4490, Noumea.
FK8AL	Garbe, Jean, Box 3994, Noumea.
FK8AS	Poulet, Achille, Port Vila, Vanuatu.
FK8AV	Schuppe, Henri, Papeete, Tahiti.
FK8AX	Lesueur, Henri, Box 541, Noumea.
FK8AY	Thomas, Daniel, Box 1960, Noumea.
FK8BC	Thomas, Henry, Box 637, Noumea.
FK8BG	Cullell, Gilbert, QSL to F6EWK.
FK8BK	Houdart, Louis, Box G 5, Noumea, Cedex.
FK8BR	Ynet-Mine, Maurice, Pouembout.
FK8BT	Perrier, Roger, Box 3956, Noumea.
FK8CC	Deramane, Simon, 88 bis rue de Papeete, Noumea.
FK8CE	Hoarau, Dominique, Box 138, Bourail.
FK8CI	Chambon, Pierre, "Les Niaoulis", 11 Saint Michel.
FK8CL	Etienne Stanislas, Box 643, Boulari.
FK8CP	Touzard, Remi, Box 945, Noumea.
FK8CQ	Naser, Louis, Box 6304, Noumea.
FK8CR	Szymanski, Eddy, QSL via F6EWK.
FK8CW	Pihahuna, William, Box 3286, Noumea.
FK8DD	Torope, Samuel, Box 3040, Noumea.
FK8DI	Rabu, Dominique, 5 rue C. Savoie, Noumea.
FK8DJ	Kryger, Jean-Claude, 21 rue Charbonneau, Noumea.
FK8DK	Florentin, Maurice, Box A 1, Noumea, Cedex.
FK8DL	Roussel, Jean-Claude, Hauts du Val Plaisance, Noumea.
FK8DM	Thouvay, Gilles, Box 2016, Noumea.
FK8DS	Grilhault des Fontaines, Gabriel, Box 1197, Noumea.
FK8DU	Valadier, Jean, Box 9, Tontouta.
FK8DX	Marc, Joel, 38 rue de Verdun, Noumea.
FK8DZ	Rivaton, Luc, 29 rue Testard, Noumea.
FK8EA	Moncomble, Gerard, Box A 1, Noumea, Cedex.
FK8EB	Pesnel, Henri, 30 ave Michel Ange, Noumea.
FK8ED	Martel, Alain/Gisele, Box 4681, Noumea.
FK8EF	Martin, Arsene, Box 3519, Noumea.
FK8EG	Rozier, Jean, Box 71, Tontouta.
FK8EH	Ollivaud, Francois, Box 4202, Noumea.
FK8EI	Cardona, Jean-Jacques, Box 2749, Noumea.
FK8EJ	Lung Fong, Bernard, Box 672, Noumea.
FK8EL	Bon, Ovide, 9 rue des Freres Arthur, Noumea.
FK8EM	Wagner, Pierre, 68 rue de 24 Septembre, Noumea.
FK8EN	Baldi, Joseph, 21 bis rue de Verteuil, Noumea.
FK8EO	Routier, Richard, 131 RT 13, Noumea.
FK8EP	Thevenet, Jean, Box 1980, Noumea.
FK8EQ	Bouget, Emile, 37 rue Jules Verne, Noumea.
FK8ES	Beaufils, Gilbert, Lot 432 Koutio, Dumbea.
FK8ET	Dufermon, Jean-Michel, Box 3859, Noumea.
FK8EV	Juncas, Jacques, Internat, Kone.
FK8EW	Leperlier, Karl, 6 rue du Collier Blanc, Noumea.
FK8EX	Lesaulnier, Rene, 131 route de l'Anse Vata, Noumea.
FK8EY	D'Hollande, Eugene, Box 2233, Noumea.
FK8EZ	Menard, Raymond, 40 rue Louis Catalan, Noumea.
FK8FA	Tuband, Aimee, Box 447, Mont Dore.
FK8FB	Debien, Lionel, Box 428, Noumea.
FK8FC	Tourette Michel, Box 2309, Noumea.
FK8FE	Vele, Jean-Marc, Box 4696, Noumea.
FK8FF	Eschembrenner, Guy, Box 3956, Noumea.
FK8FG	Le Pelletier, Bernard, Box 6258, Noumea.
FK8FH	Cornaille, Alain, Box 3204, Noumea.
FK8FI	Nagle, Alain, Box 136, La Foa.
FK8FK	Torregrossa, Jean-Philippe, Box 8485, Noumea.
FK8FL	Gazengel, Albert, Box 4561, Noumea.
FK8FM	Demene, Thierry, Box 3956, Noumea.
FK8FO	Chanaron, Jean-Paul, Box 7133, Noumea.
FK8FP	Lesca, Pierre, Box A 2, Noumea, Cedex.
FK8FQ	Moreau, Jean-Claude, Box 3956, Noumea.
FK8FR	Nixon, John, Box 65, Noumea.
FK8FS	Todori, Georges, Box 3956, Noumea.
FK8FT	Bertolino, Henri, Box 135, Paita.
FK8FU	Montaigne, Daniel, QSL via NA5U.
FK8FV	Estienne, Daniel, 79 rue de Sebastopol, Noumea.
FK8FW	Coutant, Gerard, 2 rue J. Jugan, Noumea.
FK8FX	Mercier, Yvon, Box J 4, Noumea, Cedex.
FK8FY	Nicolas, Jean-Claude, Box 1527, Noumea.
FK8FZ	Blanchet, Yves, 35 rue Alfred de Vigny, Noumea.
FK8GA	Andrea, Georges, 8 rue du Jura, VDC, Noumea.
FK8GB	Soares, Antonio, Box 3125, Noumea.
FK8GC	Berniere, Charles, 16 rue Felix Broche, Noumea.
FK8GD	Faure, Patrice, Bat F2 rue 18 Juin Magenta, Noumea.
FK8GF	Millot, Alexandre, Box 3977, Noumea.
FK8GG	Ambrogi, Francois, Box 344, Noumea.
FK8GH	Lebiez, Jean-Louis, Box 1094, Noumea.
FK8GI	Lebiez, Francoise, Box 1094, Noumea.
FK8GJ	Bourez, Marc, QSL via F6CXJ

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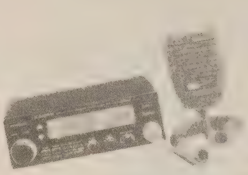

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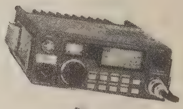

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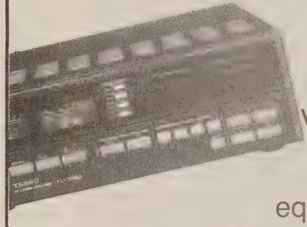

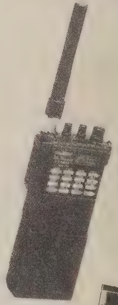

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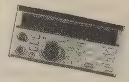

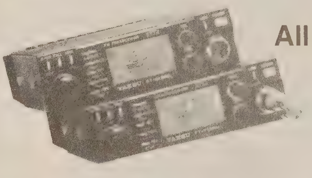

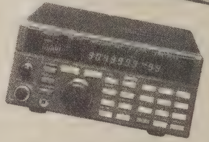

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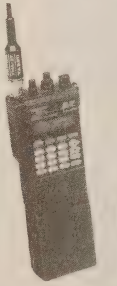

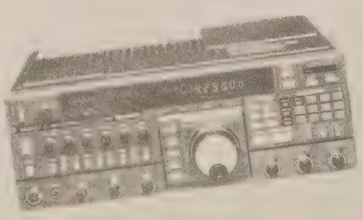

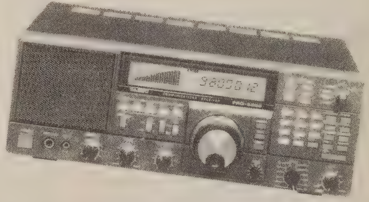

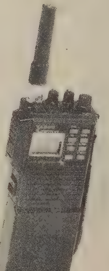

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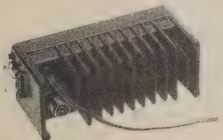
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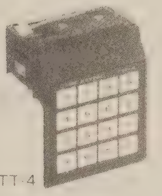
FTT-4

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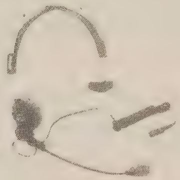
MD-1B8


YH-1

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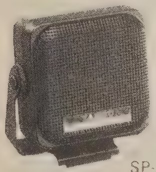
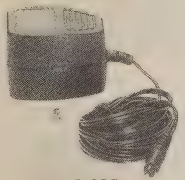
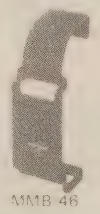

SP-3

FNB-12/-14


NC-28B

MMB-32A


MMB-46

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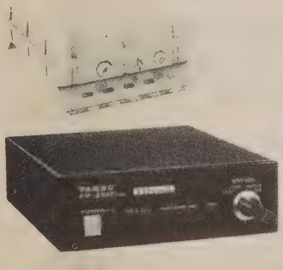
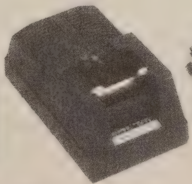
the ultimate in amateur radio

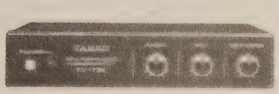
MH-1B8


FIF-232Cvan


NC-29

CSC-22

CLIP-1


TV 736

HEAD OFFICE: P. O. BOX 15-910, NEW LYNN, AUCKLAND. PHONE (09) 627-1613
NATIONAL RETAIL DISPLAY - COM-CENTRE, AUCKLAND. PHONE (09) 673-213, OR YOUR LOCAL YAESU DEALER

NZART Non-Transmitting Members

as at February 22, 1990

Armstrong, K. M., ZL1315, P.O.Box 209, Kawerau.3452

Bahniuk, P., 16 Armidale Street, Petone.6303
Beck, W. R., 15 Napier Terrace, Napier.4001
Biggelaar, P. J., c/- P.D.C., Post Office, Parakai.1450
Bilby, D. F., ZL2310, 3 Kiwi Road, Raumati Beach.6150
Bilton, R. C., ZL1221, 17 Brydon Place, Avondale, Auckland.1207
Bocock, J. W., 64 Uxbridge Road, Howick.1705
Booth, G. D., ZL485, 10 Harvey Terrace, Balclutha.9200
Brenchley, G. C., 58 Diaz Drive, Flaxmere, Hastings.4201
Brown, J. A., 17 McLintock Street, Johnsonville, Wellington.6004

Carran, P. S., 50 Bengal Drive, Christchurch.8002
Carrell, S. J., 33 Ryeland Avenue, Christchurch.8004
Carrell, T. R., 33 Ryeland Avenue, Christchurch.8004
Carter, R. D., 31 Tongariro Street, Hamilton.2001
Cassie, A. F., 68 Oriel Avenue, Tawa.6203
Cook, R., 29 Ascot Terrace, Thorndon, Wellington.6001
Couchman, J. N., P.O.Box 319, Palmerston North.5300

Dawson, S. F., 23 Ansonby Street, Avonhead, Christchurch.8004
Dent, P. W., 6 Mathew Place, Whangarei.0101
Donaldson, M. H., P.O.Box 899, Papakura.1733
Duran, R. A., 3/130 Kohimarama Road, Auckland, P.O.Box 25-130, St Heliers, Auckland.1130

Ellis, G. P., ZL364, 74 Le Cren Street, Timaru.8601
Ensor, M., 84 Wheturangi Road, One Tree Hill, Auckland.1105
Eteveneaux, G., ZL2236, 8 Clematis Grove, Lower Hutt.6301
Eustace, R. W., 19 Rapakai Street, R.D.11, Turakina Beach.5152
Evans, A., ZL1298, P.O.Box 164, Matamata.2271

Farrow, J., ZL202, 25 Wai-iti Crescent, Lower Hutt.6301
Feldon, D. C., ZL2269, 5 Memphis Place, Rotorua.3201
Ferguson, K. D., 3 Grove Lane, Pakuranga.1706
Fluerty, R. M., 24 The Sounding, Whitby.6251
France, R. E., 3 Muir Street, Green Island, Dunedin.9006
Fraser, P. J., 128 Totara Drive, Hamilton.2001
Freeth, V., P.O.Box 66-029, Beach Haven, Auckland.1330
Fryer, R. J., 10 Mahana Road, Paraparaumu.6153

Gaudin, D. A. J., 18 Trafalgar Street, New Plymouth.4601
Gee, D. M., ZL139, 5 Rhodes Avenue, Mt Albert, Auckland.1003
George, S. B., 6 Seymour Street, Waitara.4656
Gordon, M. J., 80 Bridge Street, South Brighton, Christchurch.8007
Gorman, J. G., ZL1269, 15 Clark Road, Papakura, Auckland.1703
Gray, J. S. H., 336 Sunset Road, Rotorua.3201
Gray, K. A., 7 Haunui Road, Pukerua Bay.6252
Grey, G. J., ZL2257, 17 Kitchener Terrace, Raroa, Johnsonville.6004
Gullett, I. W., 55b Kings Avenue, Wanganui.5001
Gusscott, N., ZL2266, 4 Penrose Street, Lower Hutt.6301

Haines, C. A., ZL4113, 37 Wairoa Street, Dunedin.9001
Hansen, J., P.O.Box 39, Swanson.1230
Hardy, C. J., ZL2316, 55 Kakariki Grove, Waikanae.6154
Hardy, D. R. T., ZL2315, 55 Kakariki Grove, Waikanae.6154
Hardy, P. W. T., ZL2314, 55 Kakariki Grove, Waikanae.6154
Harper, E. J., 233 The Esplanade, Petone.6303
Hastings, A. W. A., P.O.Box 10-219, The Terrace, Wellington.6036
Hellberg, D. J., Norfolk Road, R.D.1, Carterton.5951
Holdaway, R. S., 6 Beechwood Close, Paraparaumu Beach.6153
Hull, O. R., c/- 12 Grainger Road, Te Atatu, Auckland.1208
Hunter, G. R. K., 145 Mellons Bay Road, Howick.1705
Hutchinson, G. J., Eltham Road, R.D.32, Opunake.4653
Hutton, W., 26 Cedar Drive, Kelvin Heights, R.D.2, Queenstown.9692

Jamieson, J. W., P.O.Box 5, Dannevirke.5491
Jennings, B. F., 10 William Street, Whangarei.0101
Johnson, R. A., ZL2217, Cliff Road, R.D.1, Marton.5151
Jury, T. R., 24 Stephens Crescent, Palmerston North.5301

Kelly, R. A., 53 Fairview Crescent, Kelburn, Wellington.6005
Killick, R. F., 67 Dunbars Road, Halswell, Christchurch.8003
King, B. R., 36 Flaxdale Street, Birkdale, Auckland.1310

Lake, S., 686 Remuera Road, Remuera, Auckland.1105
Lamberton, J. J., 97 Lynn Road, Glenfield, Auckland.1310
Lambeth, F. R., 24 Marslin Street, Alexandra.9181
Lawn, B. A., 29a Brecon Road, Stratford.4700
Lee, J. W., 48 Tinirau Street, Wanganui.5001
Lee, I. K. M., 11 Knigges Avenue, Wellington.6001
Levin, C. G. W., R.D.9, Palmerston North.5321
Luxton, L. F., "Ahura", 3 Luxton Place, Christchurch.8008

McAnulty, G. B., 1 Landsdowne Crescent, Masterton.5901
McCallum, I. B., 146 Winara Avenue, Waikanae.6154
McIntyre, J. S., 27 Albert Street, Island Bay, Wellington.6002
McNickle, R. G., 1 Cedar Place, New Plmouth.4601
MacPherson, G. D., 27 Dunbarton Street, Redwood, Christchurch.8005
Marshall, D. W., 7 Cobden Lane, Napier.4001
Meikle, R. C., 32 Raroa Terrace, R.D, Oratia, Auckland.1230
Midwinter, G. G., 473 Ruahine Street, Palmerston North.5301
Milne, A. C., 111 Essex Street, Masterton.5901
Mitchell, M. D., ZL1248, P.O.Box 13-501, Onehunga, Auckland.1132
Moore, J. R., 4a Eliot Street, New Plymouth.4601
Moss, R. V., ZL2196, 19 Mysore Street, Khandallah, Wellington.6004

Nisbet, A. C., c/- Data Bank Systems, P.O.Box 3647, Wellington.6000

Orchard, P. N., 92 Springs Road, Hornby, Christchurch.8004

Park, R. A., ZL2259, P.O.Box 30-152, Lower Hutt.6300
Parsons, C., 44 Yearsley Place, Manurewa, Auckland.1702
Pawson, S. R., P.O.Box 186, Masterton.5900
Pearce, Z. M., ZL2129, 17 Lake Ferry Road, R.D.2, Featherston.5952
Poletti, N. R., 186 Normandale Road, Lower Hutt.6301
Powe, S. E., Killinchy, R.D., Leeston.8151
Pye, E., ZL2163, 33 Wyndham Road, Pinehaven, Upper Hutt.6402
Pye, J., ZL2162, 33 Wyndham Road, Pinehaven, Upper Hutt.6402

Rait, I. C., ZL4115, "Longwood", R.D.1, Riverton.9654
Rait, S. M., ZL498, "Longwood", R.D.1, Riverton.9654
Reeves, L. J., 75 Banks Road, Mt Wellington, Auckland.1106
Richards, P. D., 26 Malcolm Avenue, Christchurch.8002
Robertson, J. H., Blackmount Station, R.D.2, Otautau.9653
Robinson, J. P., 6 Northview Crescent, Dunedin.9001
Roylands, D. M., Landsroy Poultry Farm, Ohariu Valley, Johnsonville, Wellington.6004
Russell, R. D., 54 George Street, Blenheim.7301

Seufert, J. A., 1a Panarma Court, Orewa.1461
Stone, E. T. G., 45 Longburn Road, Henderson, Auckland.1208
Sutton, G. A., Dunn Road, Ararimu, R.D.3, Drury.1752
Sutton, R. L., P.O.Box 22-011, Khandallah, Wellington.6030
Sykes, J. W. A., 38b Clark Road, Kamo, Whangarei.0101
Swain, P. J., 29 Shackle Lane, Whitby, Wellington.6253

Thirkettle, R. J., ZL3126, 206 Strickland Street, Christchurch.8002
Thomas, R., ZL136, 2 Matai Avenue, Matamata.2271
Thomson, B. D., ZL149, 14 Puriri Street, Kamo, Northland.0101
Treneary, G. A., ZL3112, 48 Mathers Road, Christchurch.8002
Tucker, L. A. M., 407 Cameron Road, Tauranga.3001

Wallace, B. R., 20 Lorne Street, Hamilton.2001
Webb, B. D., ZL2262, 71 Hillside Drive, Upper Hutt.6401
Webb, W. R. C., 13 Rembrandt Avenue, Linden.6203
Wiggins, F. G., ZL1306, 12 Windsor Street, Tokoroa.2392
Wilkinson, B. C., P.O.Box 64, Kawerau.3452

NZART Overseas Members

as at February 22, 1990

Aarsse, A. J., VK4QA, P.O.Box 211, Nambour, Queensland 4560, Australia.
Allaway, E. J., G3FKM, 10 Knightlow Road, Birmingham, B17 8QB, England.
Allen, G. P., W3RLA, 7 Hilldale Circle, Lansdowne, PA 19050, USA

Barrington, R. K., VK2DOV, 37 Oatley Park Avenue, Oatley, NSW 2223, Australia.
Boe, T., N/Keisermark 15, N-3190 Horten, Norway.,
Bowman, H. N., 20 Hazelgrove, Gateshead NE10 8DP, Tyne and Wear, United Kingdom.
Broadbridge, E. K., 3D2CS, c/- P.O.Box 1046, Suva, Fiji.,
Brook, R. L., VK2AI, P.O.Box 148, Gosford, NSW 2250, Australia.
Bruyne, W., PA3BLL, Marshallplein 26, 2286LM Ryswyk ZH, The Netherlands.,

Campbell, A., GM3VAR, 2 Dunlin Crescent, Houston, PA6 7GX, Scotland.
Chatfield, D. J., ZL1BPZ, P.O.Box 98, Mt Tamborine, QLD 4272, Australia.
Clarke, B. S., VK5BS, 17 Sycamore Avenue, Novar Gardens, SA 5040, Australia.
Clarke, D. J., ZK1DD, P.O.Box 10, Aitutaki Island, South Cook Islands.,
Cooksley, G., VK2FNB, P.O.Box 175, Tamworth, NSW 2340, Australia.
Couch, D., VK6WT, 9 The Grove, Wembley, WA 6014, Australia.
Creasy, S. C., ZL1BH, Tyburn House, Sha Ha, Sai Kung, NT, Hong Kong.
Cruden, M. C., VK2ASC, 9 Nioka Road, Narrabeen, NSW 2101, Australia.
Cunliffe, R., GOHVJ, 2 Elizabeth House, Didsbury Road, Stockport, SK4 2AY, England.
Curling, L. K., VK3NM, 18 Lexington Street, Vermont, VIC 3133, Australia.

Discombe, R., YJ8DE, P.O.Box 56, Port Vila, Efate Island, Vanuatu.
Donovan, G. J., ZL2ADG, c/- Royal Brunei Airlines, P.O.Box 737, Bandarseri, Begawan, Brunei.

Edward, R. D., VK6AOK, 13 Broome Street, Nedlands, WA 6009, Australia.
Egan, P. D., ZL3TNE, c/- TCB-Ibrahim Sdn Bhd, P.O.Box 2720, Bandar Seri, Begawan 1927, Brunei Darussalam.

Fraser, B. H., ZL3FZ, Route 3, Box 3455, Orland, CA 95963, USA.

Gaizatu, M., P.O.Box 5498, Tokyo International, 100-31, Japan.,
Garrod, J., VK2EHM, ZL2BMO, P.O.Box 5229, Bundaberg, Queensland 4670, Australia.
Gooday, J. D., 12 Marlborough Hall, 4 Ward Avenue, Potts Point, NSW 2011, Australia.
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Hall, W. G., G8JM, 48 Hawkdene, N.Chingford, London E4 7PF, England.
Hardisty, N. E., VK4BIT, 93 Minto Crescent, Arana Hills, Brisbane, Queensland 4054, Australia.
Harms, D., VK3XDJ, R.M.B. 6483, Everton, Upper Victoria 3746, Australia.
Hathaway, R. L. S., G3JHI, 30 Berkley Drive, Hornchurch, Essex RM11 3PY, England.
Hills, J. D., VK6YAX, P.O.Box 323, Melville, Perth WA 6156, Australia.
Hislop, S. J. K., VE7ANF, 3814 Cadboro Bay Road, Victoria BC V8P 5E6, Canada.,
Hoover III, H., W6ZH, 1520 Circle Drive, San Marino, California 91108, USA
Horner, W. J., VK4MWZ, 26 Iron Street, Gympie, QLD 4570, Australia.

Irvine, E. J., VK3BXA, "Moorilyn", Thoona, VIC 3726, Australia.
Ishikawa, K., JA2AUI, 62 Kinjo Nishio-Shi, Aichi-Ken 445, Japan.,

Jardine, M. A., VK2BUJ, P.O.Box 408, Lavington, NSW 2641, Australia.
Johnson, C., KOGWI, 3654 Polk, NE Minneapolis, Minnesota 55418, USA

Kelly, B., VE7CBK, 8700 Minler Road, Richmond, BC V7C 3T9, Canada.
Kerns, J., N4PUQ, 273 Sisson Street, Oliver Springs, Tenn 37840, USA.

Laidlaw, D. J., VK3KDI, 40 Butterworth Street, Swan Hill, VIC 3585, Australia.
Lickfeld, K. G.(Prof.Dr), DL3FM, Romebecker WEG71 D-4330, Mulheim A D, Ruhr 1, West Germany.
Louttit, L. W., VK2BE, 17 Thompson Street, Earlwood, NSW 2206, Australia.

Magon, T. E., VK2CBC,ZL4DE, 4/1 Bedford Place, South Coogee, NSW 2034, Australia.
Mawhinney, P. E., VK2AFW, 3/23 Henley Road, Homebush, West Sydney NSW 2140, Australia.
Maxwell, J. A., W6CF, P.O.Box 473, Redwood Estates, CA 95044, USA
McDougall, D. S., W9IV, 25 Pine Forest Road, Haines City, Florida 33844, USA.
McGilp, F. C., G8URB, Meadows Beechfield, Frilsham, Newbury, Berks RG16 9XD, England.
McLellan, D. P., VK4DPM, 30 Barcoorah Street, Westlake, QLD 4074, Australia.
Miles, G. R., VK4UGC, 11 Kestrel Drive, Burleigh Waters, QLD 4220, Australia.
Millard, G. O., VK6GK, 19/64 Hastings Street, Scarborough, WA 6019, Australia.
Miller, E. D. N., VK4CIV,ZL1AXH, P.O.Box 2009, Southport, Queensland 4215, Australia.
Movius, L. J., NT6B, 20985 Sultana Drive, Perris, CA 92370-8930, USA.
Mutton, J. O., WA6JUA, 721 Sierra Street, El Segundo, CA 90245, USA.
Mutzelburg, R. K., VK4IY, 51 Spicer Street, Laidley, QLD 4341, Australia.

Nallawalla, A. (Flt. Lt.), ZL4LM, P.O.Box 539, Werribee, Victoria 3030, Australia.
Norden, A. P., VK4CGN,ZL2SJ, Sun Surf Motel, 56-58 Nicklin Way, Kaurana Waters, 4575 Sunshine Coast, Queensland, Australia.

Peyton, T. M. (Dr), VK3XTP, P.O.Box 108, Keilor 3036, Australia.,

Reid, D. D., W9RWD, P.O.Box 773, Tremont, Illinios 61568, USA.
Rogers, G. L., VK6RO, 22 Grace Street, Ferndale, WA 6155, Australia.

Samsu, B. S., YBOEBS, 935 North Whittier Drive, Beverley Hills, CA 90210, USA.
Sheley, J. W., KA6DXY, 5849 Hansen Drive, Pleasanton, CA 94566, USA.
Sloane, C., VK2EEC, 2 Lancelot Street, Blacktown, NSW 2148, Australia.
Smith, J. W., KA7APJ, 4711 NE 50th, Seattle, WA 98105, USA.
Switzer, G. E., VK2SR, 53 Turf Street, Grafton, NSW 2460, Australia.

Tabiang, H. J., T30BC, Abemama Island, Republic of Kiribati, Central Pacific Ocean.,
Thurlow, P., G4YUP, 41 Kings Way, Billericay, Essex CM11 2QF, England.
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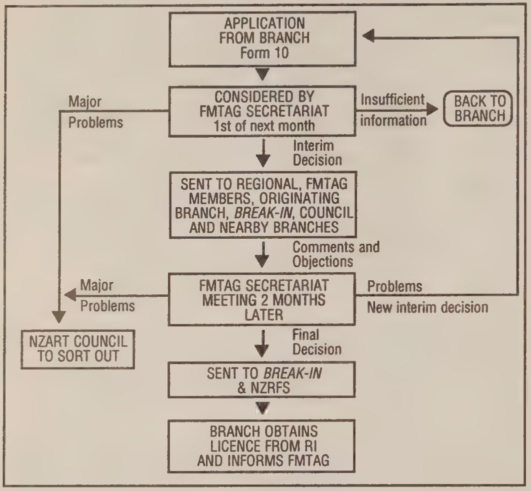
Toomath, B. E., VK4BTE, Unit 4, 14 Waterloo Street, Cleveland QLD 4163, Australia.

Walker, R. W., VK2YRX, P.O.Box 279, Drummdynl, NSW 2047, Australia.
Wardlaw, D., VK3ADW, 21 Tormey Street, North Baldwin, VIC 3104, Australia.
Watkins, W. A., ZL4DO, P.O.Box 262, Airlie Beach, 4802, Australia.
Wilkinson, K. S., JG1YCI, C.P.O.Box 1748, Tokyo, Japan 100-91.,
Wilson, C. R., K1GVA, 61 Warwick Street, Portland, Maine 04102, USA.
Wilson, P., VE7CQF, 110-145 King Edward Street, Coquitlam, BC V3K 6L9, Canada.
Wilson, R. L., VK2BRC, Glencoe, Canobolas Road, Orange, NSW 2800, Australia.
Woods, A. H. G., G8NNG, 14 Anstead Drive, Rainham, Essex RM13 7QS, England.
Wright, C. P., VK7LZ, 10 Highgate Street, Youngtown, TAS 7249, Australia.
Wylks, W. G., VK2BWY, 14 Hector McWilliam Drive, Tuross Head, NSW 2537, Australia.

FMTAG
FREQUENCY MANAGEMENT AND TECHNICAL ADVISORY GROUP

The Frequency Management and Technical Advisory Group (FMTAG), are a group that determine frequency assignments and set technical standards for NZART Council. A data base of amateur fixed stations is maintained, a summary of which is printed in this Call Book. NZART Branches may apply to FMTAG to establish fixed stations. The procedure is shown in Figure 1. Start by writing to the secretary for an FMTAG Form 10.

From time to time FMTAG publishes in Break-In papers on technical matters of current interest for comment and discussion. We are always keen to have feedback from amateurs on these matters, and any other issues that you think should be addressed.


APPLICATION FROM BRANCH Form 10
CONSIDERED BY FMTAG SECRETARIAT 1st of next month
Major Problems
Insufficient information
BACK TO BRANCH
Interim Decision
SENT TO REGIONAL, FMTAG MEMBERS, ORIGINATING BRANCH, BREAK-IN, COUNCIL AND NEARBY BRANCHES
Comments and Objections
FMTAG SECRETARIAT MEETING 2 MONTHS LATER
Major Problems
Problems
New interim decision
NZART COUNCIL TO SORT OUT
Final Decision
SENT TO BREAK-IN & NZRFS
BRANCH OBTAINS LICENCE FROM RI AND INFORMS FMTAG

FMTAG consists of a secretariat in Wellington consisting of a Chairman ZL2SX; Secretary ZL2TAX; and Frequency Co-ordinator ZL2TAR.

There are ten regional members of the group: ZL1UEU, ZL1UAB, ZL1TKL, ZL1BTB, ZL1QI, ZL2BPY, ZL2TYP, ZL1THA, ZL3TAC and ZL3NM.

Address all FMTAG correspondence to:
FMTAG Secretary, ZL2TAX
54 Brooker Grove
Wellington 4.

Technical standards

	Polarization	Bandwidth/Mode	Bands
FM voice repeaters	V	16kOF3EJN	29 MHz up
FM non-regenerating data repeaters	V	16kHz/any	29 MHz up
Digipeaters	V	16kHz/any Protocol any	29 MHz up also 26.957 to 27.283 MHz
ATV repeaters/ beacons	H	6M25C3F/ 750kF3EGN CCIR system B	70 cm up
Beacons	V or H	less than 1kHz/ A1 or F1	28 MHz up
Propagation/ interference monitors	V	16kHz/any	70 cm up
Links	any	30 kHz below 23 cm/any	70 cm up

THE NZART QSL BUREAU

The NZART QSL Bureau is one of a network of bureaux established throughout the world by the IARU to facilitate the exchange of QSL cards between NZART members and radio amateurs, in other countries. The service is free to both transmitting and receiving members of the NZART and is available to non-members for 25 cents per card.

A "member" is an operator or listener who is a member of the NZART at Branch and National level in accordance with clause 27(c) of the NZART Constitution.

Outward Cards

All QSL cards for transmission to radio amateurs and listeners in New Zealand and other countries should be posted to the **QSL Manager, NZART QSL Bureau, P. O. Box 35-046, Naenae, Lower Hutt.**

QSL cards should not exceed normal postcard dimensions (140×90 mm). The callsign of the person to whom the card is addressed should be printed **clearly** in large letters on both sides of the card, ie, ensure that the letter V will be read as V, not U, etc.

Weigh all packages carefully before despatch in order to ensure adequate postage is paid, as the Bureau may refuse to pay any shortage which usually costs double the deficient postage plus a surcharge. Cards should be sorted into New Zealand callsign order, USA call areas, Australian call areas and all others into alphabetical order. Cards should be posted to the QSL Bureau on a three or four weekly basis rather than a three or four monthly or a one or more yearly basis.

Members must enclose a current *Break-In* label with each bundle of cards forwarded direct or through their Branch to the QSL Bureau. Non-members must enclose the equivalent of 25 cents per card.

Cards received without the *Break-In* label or the remittance of 25 cents per card will not be processed until such time as proof of membership is established or the remittance is received.

An item of Particular Importance

If you work a ZL0, ZL5, ZL6, ZL7, ZL8, ZL9, ZM5, ZM6, ZM7, ZM8, ZM9, ZK3, ZK4, ZK5, ZK6, ZK7, ZK8, or ZK9 station you should ascertain where the QSL card is to be forwarded and show this information on the back of the card. If on the other hand you are using one of the above calls you should advise any station you contact where his or her QSL card should be forwarded to and indicate to your contact that this information should be shown on the back of the card. **Failure to meet this requirement could result in QSL cards being returned to the senders with the endorsement "unclaimed".**

Collecting cards from the Sub-Bureaux by Members and Non-Members

Supply your particular QSL Sub-Bureau listed below with stamped self-addressed envelopes (of size not less than 170×170mm).

ZL1—J. Small ZL1KQ, 32 Paddington Street, Glen Innes
Auckland 1106.

ZL2—T. Marr ZL2AGY, 3 Crown Hill, Titahi Bay 6202.
ZL3—G. Halliburton ZL3GI, 6 Barlow Street, Christchurch 8004.
ZL0—L. G. Wilson ZL2AWK, P.O. Box 35-046, Naenae
Lower Hutt 6300.
ZL5 to ZL9—L. G. Wilson ZL2AWK.
ZK3 to ZK9—L. G. Wilson ZL2AWK.
ZM5 to ZM9—L. G. Wilson ZL2AWK.

Make sure your address is legible on the self-addressed, stamped envelope. Print your callsign on the front of the envelope, as the Sub-Bureau deals only with callsigns, not with operators' names.

Any specific requests for forwarding cards should be printed on the back of the envelope such as "send when 15 cards" or "send when weighs 250g", etc.

Envelopes should be numbered and "Last Envelope" marked on one so that the recipient automatically knows when to renew the supply.

It should be noted that the Sub-Bureaux are arranged in callsign groups, and therefore if you are a ZL1 living in another district in New Zealand your cards will be held by the ZL1 Sub-Bureau. Similarly with ZL2, ZL3, and ZL4.

General Notes

If you don't exchange QSL cards or only exchange cards in special circumstances, you should make this quite clear to your contact. This will save you, your contact and the QSL Manager, time, labour and money.

QSL cards are posted to and received from over 240 QSL Bureaux throughout the world. In addition many cards are received direct from operators and listeners overseas for distribution to members via the ZL Sub-Bureau.

The QSL Bureau is staffed by one voluntary member, namely the QSL Manager. He handles approximately 30,000 to 40,000 cards per month and if operators and listeners follow the simple rules mentioned above this will greatly assist him to provide an efficient and cheap QSL service to members.

Members can obtain the address of any overseas QSL Bureau or Bureaux, a specification for a standard QSL card and any other information required regarding the QSL service from the QSL Manager, P.O. Box 35-046, Naenae, Lower Hutt. All such requests should be accompanied by a stamped self-addressed envelope.

The telephone number of the QSL Bureau is Wellington (04) 699-238.

Video Tape Library

Listed below are current titles of video tapes held in the Headquarters video tape library for loan to Branches. The only charge is for postage. Each tape comes within the 500 gram non-standard second-class mail rate at 95c and this can be multiplied up for more than one tape posting.

However, a quick turnaround of tapes is essential for the scheme to operate. Don't put the tapes away in a drawer after your Branch meeting. Have it in the post the same evening. One Branch held a tape for six months and one other circulated among Branches without advising Headquarters.

Titles and Details are:

1. *All China RDF Competition*
   A serious **30 minute** look at Amateur Radio Direction Finding—an official sport in China.
2. *The Happy Flyers Techniques of RDF*
   A **26 minute** Audio/Visual presentation of the theory and techniques for VHF Radio Direction Finding.
3. *Moving up to Amateur Radio* plus *A Hams Wide World*
   15 and **60 minutes.** General information and public relations material for Amateur Radio. A little dated now but good general information. ARRL Production.

*4. *The Aerial Circus with Dud Charman G6CJ*
   45 minutes. Verification of the theory of operation of a variety of VHF and HF antennae. See the theory confirmed by means of scale model antennae.

5. *Amateur Radio's Newest Frontier*
   30 minutes. A recent production from ARRL. Looks at the Radio Amateurs' involvement in space.
6. *Yaesu Production*
   A look at the production of Yaesu equipment, the factory staff, working conditions, equipment assembly and testing.
7. *NAREC 50*
   A **60 minute** production by Branch 24. Looks at the Napier Conference and the 50th Anniversary of AREC.

*8. *Communications-The Hidden Revolution*
   135 minutes. An address and demonstration by the Engineer-in-Chief, New Zealand Post Office, on modern communications techniques and methods.

9. *The Integration and Launch of AMSAT OSCAR-10*
   A **35 minute** preview of the preparation and launch of OSCAR-10 by Werner Haus DJ5KQ.
10. *AMSAT OSCAR-10*
    28 minutes. A further look at OSCAR-10 preparation and launch. Contains much of the footage in (9) above. A more pacy presentation. Film shown at Christchurch Conference 1985.
11. *Packet Radio Primer*
    A **30 minute** introduction to packet radio for beginners. A good Branch meeting tape.
12. *The Wonderful Wide World of Amateur Radio*
    Produced by JARL, a **27 minute** look at amateur radio in Japan.
13. *IARU Region 3 Association Conference 1985-RSGB.*
14. *IARU Region 3 Association Conference 1985-WIA.*
15. *NZART ATV Official Broadcast, 30 March 1986.*
16. *Bill Orr W6SAI Whakatane Conference Opening June 1988*, **20 minutes.**
17. *1987 Dayton Hamvention KG0P production*, **30 minutes.**
18. *ARRL's New World of Amateur Radio*, 1988 (via W6SAI).
19. *W6SAI Sunday 5-6-88 Lecture Linear Amplifiers*
20. *Component Identification-ZL1TOF*, **18 minutes.**
21. *Launch Ariane IV 15-6-88, Vibration Test and Integration of OSCAR-13.*
22. *Interview with Gerald Beattie 21-6-89*, **28 minutes.**

In addition audio tapes are held for loan:
NZART Monitoring Service
Sounds of Amateur Radio—WIA
Last AGM set of tapes (6)

Note: Tapes above denoted * are more appropriate for a technical audience. Other tapes are suitable for general viewing.

Applications to General Secretary, NZART, P.O. Box 40-525, Upper Hutt.

Amateur Radio Examination

Examination Entry Forms can be obtained from your local office of the Radio Frequency Service, from NZART Branch Secretaries, or from Headquarters. The current examination fee is $10.00 plus GST for Part A and $9.00 plus GST for Part B.

The syllabus for the Amateur Radio Examination can be viewed in the 1987 NZART *Call Book*, pages 109–111, and is still current.

The examination scheme is under review. The examination has been devolved from the Ministry of Commerce, Communications Division, to NZART. The first NZART-conducted examinations were held in March 1990. It is expected that the examinations in September 1990 (and perhaps in March 1991) will follow the same pattern. Details of developments and changes will be published in *Break-In* and in Branch circulars from time to time.

The address of the Co-ordinator, NZART Examinations Division, is NZART Headquarters, PO Box 40-525, Upper Hutt.

The NZART Reciprocal Licencing Bureau

With appropriate licences and approvals, New Zealand radio amateurs may operate in some overseas countries. This is possible through "reciprocal agreements' between governments, through "Commonwealth recognition", or "guest licences". These three arrangements are distinctly different and apply in different countries in different ways.

It can be a lengthy business to get approval to operate in some countries. A residential qualification of months may be needed. Some countries prohibit portable and hand-held operation and may require that the station installation be inspected and tested. Procedures, rules and bands available vary considerably.

Council have appointed Russ Garlick, ZL3AAA, as the co-ordinator for the "NZART Reciprocal Licence Bureau." Should you contemplate an overseas trip, an early enquiry could assist you to obtain overseas operating privileges. Russ keeps information on the requirements and procedures that a ZL radio amateur should follow to operate in many countries. He can supply the address of the licensing authority with whom you should correspond in most countries, and the address of the IARU amateur radio society. It will be appreciated that a long lead-time is necessary in your dealings with overseas administrators.

Finally, it would be appreciated if you could provide Russ with copies of licences, regulatory brochures, etc., when you return, so that your experience can be used to assist others who travel.

The address is: Mr R. A. Garlick, ZL3AAA, 23 Lydia Street, Greymouth. Remember to include your NZART membership number or a *Break-In* label.

To obtain and Australian Amateur Visitors Licence

An application for an amateur station licence should be made on a form DOC57 to any DOC office. The Department of Communications have offices in all main cities, where in most cases a licence can be issued over the counter. The licence is valid up to one year. The Department has an info brochure "Guide to Amateurs Visiting Australia'' available, known as DOC517.

The application should be accompanied by photostat copies of valid licence held and operators certificate and copy of receipt of payment for your New Zealand licence. A remittance of $A26 is also required on application.

Providing documentation is in order there should be no difficulties in obtaining a licence by bona-fide visitors.

The kind of licence issued would be the equivalent of the applicants home licence. The operation of the licence must conform to Australian amateur band conditions and radio regulations.

To obtain a USA Amateur visitors licence

Reciprocal Agreements

New Zealanders who hold a valid licence issued in New Zealand may apply for a permit to operate in the USA.

Application

Application form FCC 610A is available from the Bureau. A photocopy of your valid licence must be included in the application form to the FCC. The permit is valid for one year unless your home licence expires sooner. Apply at least 60 days in advance. The USA licence is renewable. Apply to Federal Communication Commission, Gettysburg, Pennsylvania 17325, USA. An address in the USA must be given (this can be a bank, ham friend, motel etc.).

Identification on the Air

You will sign your home (native) call, plus the Morse "/" or phone "portable", followed by the representative prefix of the call area where you are allocated (for example, ZL1AAA/W1 and ZL3ZZZ/KP4). At least once during each contact with another amateur station, you must give your geographical location (in English) as nearly as possible by city and state, or US possession.

Frequencies and Transmitter Power

You will have all the privileges that you have in your home country as long as they do not exceed the privileges of the Amateur Extra Class licence of the USA.

Guest Licences

New Zealand licenced operators can obtain a guest licence in the Republic of South Africa, Hong Kong and Finland.

Visitors to New Zealand

Intending visitors requiring information can do so from :

NZART Reciprocal Licencing Bureau
Russ Garlick ZL3AAA
23 Lydia Street, Greymouth
New Zealand 7801.

Visitors are also advised to obtain a copy of the NZART Callbook, which contains amateur frequencies, band plans, repeater locations, branch information and much other information. Callbook will be of assistance to amateur radio visitors travelling in our country and can be purchased from :

NZART General Secretary
P.O.Box 40-525, Upper Hutt
New Zealand.

The current price is $NZ20.

Short term

Generally a "licenced" overseas amateur visiting New Zealand may be permitted to operate, while visiting this country for up to four weeks, on 144 MHz or above, under the following conditions:

1. No application need be made.
2. No fee is charged.
3. For a period of not more than four weeks.
4. They should be able, if necessary, to satisfy the RFS that they hold a current licence and/or certificate equivalent to the New Zealand Limited or General qualification, valid for the term of their visit.
5. A copy of their current licence and/or certificate must be carried whilst in New Zealand.
6. Usage meets the requirements of the New Zealand Radio Regulations 1987 and conform to the terms, conditions and restrictions applying to amateur apparatus operating in New Zealand.
7. They operate using their home callsign suffixed by ZL1, 2, 3, 4 as appropriate.

NOTE : Those amateurs wishing to operate below 144 MHz or for more than four weeks must make application for a visitors licence and be licenced in a country with reciprocal agreement or British Commonwealth agreement with New Zealand.

Reciprocal Agreement

Countries with reciprocal agreements with New Zealand are Sweden, Switzerland, United States of America, French Republic, Netherlands and West Germany.

British Commonwealth Agreement

Holders of valid amateur certificates issued in Australia, United Kingdom, Canada, Cook Islands, India, Niue, Papua New Guinea, Zimbabwe and Irish Republic.

No prior application is necessary. A personal application should be made to an office of the NZRFS and a licence will be issued immediately over the counter. Applicants must submit :

1. A valid copy of the operating licence which must indicate the morse speed at which the applicant qualified.
2. A New Zealand postal address where all correspondence can be sent.
3. For British Commonwealth recognition the appropriate licence fee is payable based on length of stay in New Zealand.

Applicants with less than 12wpm morse qualification will be granted a Limited licence. Higher qualifications can be obtained by passing the appropriate examination in the usual way. Applicants with 12wpm or higher morse speed qualifications will be granted a General licence.

Visiting amateurs will be allocated callsigns from the ZL0 series.

The New Zealand Radio Regulations governing amateur band operations must be adhered to.

Monitoring Service

The "EMM" column on the report form (below) is an abbreviation for Emission, as in Mode of Emission. It is obvious from reports received that many amateurs do not know how to classify signals. The following, simplified from the International Radio Regulations, may assist.

The basic characteristics of radio emissions are usually given in a three symbol group, such as A1A for Morse Code.

These symbols are arrived at as follows:

First symbol—type of modulation of the main carrier.

Second symbol—nature of signal(s) modulating the main carrier.

Third symbol—type of information to be transmitted.

Modulation used only for short periods and incidental purposes, such as identification, may be ignored.

Tables

1. **First symbol—type of modulation of main carrier**
   - 1.1 Emission of an unmodulated carrier N
   - 1.2 Emission in which the main carrier is amplitude modulated, including angle-modulated sub-carriers—
     - 1.2.1 Double-sideband A
     - 1.2.2 Single-sideband, full carrier H
     - 1.2.3 Single-sideband, reduced or variable carrier R
     - 1.2.4 Single-sideband, suppressed carrier J
     - 1.2.5 Independent sidebands B
     - 1.2.6. Vestigial sideband C
   - 1.3 Emission in which the main carrier is angle-modulated—
     - 1.3.1 Frequency modulation
     - 1.3.2 Phase modulation G
   - 1.4 Emission in which the main carrier is amplitude and angle-modulated either simultaneously or in a pre-established sequence D
   - 1.5 Emission of pulses—
     - 1.5.1 Sequence of unmodulated pulses P
     - 1.5.2 A sequence of pulses—
       - 1.5.2.1 Modulated in amplitude K
       - 1.5.2.2 Modulated in width/duration L
       - 1.5.2.3 Modulated in position/phase M
       - 1.5.2.4 In which the carrier is angle-modulated during the period of the pulse Q
       - 1.5.2.5 Combination of the above V
   - 1.6 Cases not covered above in which an emission consists of the main carrier modulated in a combination of angle, amplitude, or pulse W
   - 1.7 Cases not otherwise covered X

2. **Second symbol—nature of signals modulating the main carrier—**
   - 2.1 No modulating signal 0
   - 2.2 A single channel containing quantized or digital information, without the use of a modulating sub-carrier* 1
   - 2.3 A single channel containing quantized or digital information, with the use of a modulating sub-carrier* 2
   - 2.4 Single channel containing analogue information 3
   - 2.5 Two or more channels containing quantized or analogue information 7
   - 2.6 Two or more channels containing analogue information 8
   - 2.7 Composite system with quantized or digital information together with analogue information 9
   - 2.8 Cases not otherwise covered

*This includes time-division multiplex X

3. **Third symbol—type of information to be transmitted.**
   - 3.1 No information transmitted N
   - 3.2 Telegraphy—for aural reception A
   - 3.3 Telegraphy—for automatic reception B
   - 3.4 Facsimile C
   - 3.5 Data transmission, telemetry, telecommand D
   - 3.6 Telephony—including sound broadcasting E
   - 3.7 Television (video) F
   - 3.8 Combination of above W
   - 3.9 Cases not otherwise covered X

Example: Morse at 80wpm. It's a double sideband emission, which gives a first symbol of "A". It's a single channel of digital information, without modulating sub-carriers, which gives a second symbol of "1" and it's Telegraphy for automatic reception, which gives a third symbol of "B".

NZART MONITORING SERVICE REPORT FORM

To: NZART MONITORING SERVICE ZL6IW
C/- R. E. Knowles ZL1BAD
Onewhero, RD 2, Tuakau 1982

Reported by (callsign)____________________

Frequency in kiloHertz____________________

Callsign of station (where known) causing harmful interference to the Amateur Service____________________

Day	Month	Year	Time	Emm	Comments

Print Clearly. Differentiate between zero and O in callsigns. Send to Co-ordinator on last day of month.

New Zealand Amateur Radio Milestones

Compiled by: Fred Johnson ZL2AMJ, 15 Field Street, Upper Hutt

1923 Regulations for Amateur, Experimental and Broadcasting stations gazetted on 17 January.

By June, nine licences had been issued.

First amateur radio contact with Australia on 26 April, 1923, between Frank Bell 4AA and Chas McClurcan 2CM on 160 metres.

1924 22 May, Ivan O'Meara 2AC in Gisborne, contacted C. Braggio CB8 in Argentina.

21 September, 4AA made first two-way contact with 6BCB in North America, on 118 metres.

18 October 6pm, the first ever direct two-way radio contact with Britain, between Shag Valley 4AA Frank Bell, and London, Cecil Goyder 2SZ, on 92 metres.

1925 International Amateur Radio Union formed in Paris on 18 April, with 23 countries represented. Z4AA Member of Executive Committee. Number of licences reached 100.

1926 In Auckland on 16 August, the New Zealand Association of Radio Transmitter formed. Subscription 2/6d for six months.

First portable transmitter/receiver licence to 2GA.

1927 International Telecommunication Union Conference in Washington established internationally-agreed frequency bands.

Sangster Shield contest started.

1928 January, first issue of *Break-In*.

On 23 September, Hilton Arthur OZ1AN made first overseas contact on 10 metres working Australian station OA3CP in Melbourne.

First crystal-controlled amateur transmitter in New Zealand built and operated by OZ4AE and OZ4AL.

1929 ZL became the amateur radio prefix for New Zealand.

NZART admitted to IARU.

Harmonically related bands came into use.

QSL Bureau handled 390 inward cards at a cost of 13/8d.

NZART negotiated a reduction in licence fee from £2/2/- to £1/10/-.

1930 11 March, 9pm, ZL1AA made contact with F8AW for first 10 metre contact between New Zealand and Europe.

Myrtle Earland ZL3AG, first YL operator.

1931 3 February, Napier Earthquake—the genesis of AREC.

QSL Bureau handling outward cards at ½d each within New Zealand and 1d each overseas.

1932 6 March, first AREC Field Day.

Radio regulations gazetted, increase in morse test speed to 12wpm.

1933 NZART log book available at 1/6d.

Official broadcasts resumed at 15wpm.

1934 Two-way aeronautical mobile contact made on 5 metres (60MHz) between ZL4BV and ZL4CA.

NZART became an Incorporated Society.

1935 TV experiments authorized on the 5 metre band and on wavelengths below 1 metre.

ZL2RC and ZL2OG communicated over a 8.5 mile path on 5 metres.

VK/ZL/OC contest started.

1936 First E-M-E attempts, on 5 metres using ICW.

1938 First TV article published in *Break-In*.

1939 World War II Closed down amateur radio for the duration.

Break-In published in cyclo-styled form throughout.

1945 8 December, 7.30 p.m. " 'H' Night". Amateur radio in New Zealand resumed on 3.5 to 3.96MHz and 58.5 to 60MHz only. Morse test 15wpm.

1946 Memorial Contest started.

50 to 54MHz made available.

Call Book included in NZART subscription as service to members.

Official broadcasts by ZL2IY commenced.

1947 First two-way contact across Cook Strait on 50MHz, 50MHz record made by ZL1HY and ZL4BK at 635 miles.

1948 First article on SSSC (SSB) in *Break-In*.

First contacts on 2400MHz, by ZL4BP and ZL4DH.

First two-way trans-Tasman contacts on 50MHz.

1949 The Maori language accepted as plain language for amateur radio.

Name of REC changed to Amateur Radio Emergency Organization (AREO) but changed almost immediately to Amateur Radio Emergency Corps (AREC).

144 to 148MHz made available.

144MHz record contact by ZL3AQ and ZL3JX at 54 miles.

World record 50MHz contact between ZL4GY and USA.

1951 ZL2ACB and ZL3LE make the first inter-district contact on 144MHz.

World record 144MHz contact, 1340 miles between ZL3AR and VK2AH.

1952 Frequency Measuring Contest started.

National Field day started.

First SSB transmitters built by and two-way contacts made by ZL1AU, ZL1QS, and ZL4AE.

First ZL2 to ZL4 contact on 2 metres between ZL2SM and ZL4BN.

21 to 21.45MHz available.

Examination became 50 multi-choice questions.

1953 420MHz record contact of 50 miles between ZL3AR and ZL3AQ.

1954 First two way contact on 10 GHz, between ZL2AKP and ZL2GQ.

First transistor articles in *Break-In*.

First transistorized transmitter, on 160 metres by ZL4GP.

Foreign languages permitted as plain language for amateur radio.

1956 First two-way RTTY contact between New Zealand ZL1WB and USA W0BP.

1958 On-air demonstration of 405 line TV on 420 MHz by ZL2APC.

1959 Midnight 31 January, 50 to 51MHz withdrawn for use for Channel 1 TV.

1960 ZL2GX achieves world first 300 DXCC.

1961 OSCAR-1 launched 14 December, first heard by ZL2HP on 17 December .

1962 Minimum age for amateur operators' certificate reduced to 14 years.

Maximum power limit raised from 100 watts to 150 watts final anode input power.

WARO formed.

1963 Doug Gorman ZL2IY awarded MBE in Birthday Honours for services to amateur radio and SAR. Non-morse licence for operation above 144MHz introduced.

1964 First hand-held 2 metre solid-state transceiver demonstrated by ZL2APC.

1965 First all-electronic scanning receiver demonstrated by ZL2APC.

First Auckland to South Island QSO on 144MHz, by ZL1AZR and ZL2ASF.

1966 Integrated circuits mentioned in *Break-In*.

1967 First mention of FETs in *Break-In*.

Establishment of beacons on 144, 432 and 1215MHz approved.

Slowscan TV on HF bands approved.

Reciprocal Licensing introduced.

1968 IARU Region III Association formed, at Sydney.

1969 Use of "Hertz" adopted by NZPO.

World record E-M-E contact ZL1AZR and SM7BAE on 144MHz.

ZM prefix permitted for Cook Bi-centenary.

ZL1WB appointed command station for Australia-OSCAR-5.

1970 First amateur band repeater authorized in Christchurch.
"Bandplan" Committee formed for 2m repeaters.
New New Zealand Radio Regulations introduced. Grades I, II and III replaced the HF permit system.
First participation in JOTA.

1971 2 metre FM repeaters established at Whangarei and Waikato.
ITU Space Conference in Geneva.
Birth of Amateur Satellite Service.
Second IARU Region III Conference, in Tokyo.

1972 All grades of operators authorized to work through OSCAR-6.
ZL1WB appointed Command Services for OSCAR-6.

1973 Morse speed reduced to 12 wpm for Grade I Operators.

1974 ZM prefix permitted for Commonwealth Games.
First full-colour ATV test-pattern transmitted by ZL2TAR.

1975 Third IARU Region III Conference, in Hong Kong.

1976 Use of 1803 to 1813 kHz authorized.
Golden Jubilee of NZART celebrated.
Sir William Pickering guest speaker at conference.
Tone digits first used on a repeater, by ZL2AMJ.
Licence fee raised to $6.00
First full-colour cover for *Break-In*.

1977 Novice grade licence introduced.

1978 40 metre band extended to 7.3MHz on a non-interference basis.
Fourth IARU Region III conference, in Bangkok.
Wellington ATV repeater operational.
First two-way contact on 24GHz, by ZL2ARW and ZL2TRV.

1979 Licence fee raised to $10.00
Hart Postlewaite WB6CQW guest speaker at Conference.
WARC in Geneva, NZART paid for an Amateur Service representative (ZL2AMJ) to attend as a member of the New Zealand delegation.
Term of office of President and Council extended to two years.
50 to 50.15MHz sharing arrangement introduced.
First Cook Strait crossing by two-way ATV, by ZL2TWM and ZL2ASF.
First 432MHz E-M-E contact with USA by ZL2BCG, and K5JL.
432MHz E-M-E record contact between ZL2BCG and I5MSH.
Tasman Sea crossed on 432MHz, by ZL1TAB and VK2BQJ.

1980 World record E-M-E contact between ZL3AAD and DL9KR on 432MHz.
QSL Bureau handled 247 000 cards at a cost of $1,300.
Frequency Management Working group established.
Callsigns made permanent for operators moving between radio districts.

1981 Conference opened by His Excellency the Governor-General.
ZL0 prefix introduced for visitors to New Zealand.
Random 5-letter groups approved for morse broadcasts from approved stations.
144MHz bandplan changes to 600kHz offset for FM repeaters.
First 2m linear repeater, Dunedin, ZL1BTB and ZL4DO.

1982 Licence fee raised to $13.
10.1MHz band made available.
Non-morse operators permitted on 51 to 53MHz band.
Fifth IARU Region III Association Conference, at Manila.
AREC 50th Birthday celebrations.
Tasman Sea crossed on 1296MHz by ZL1AVZ and VK2BDN.

1983 World Communications Year, ZM prefix used.
Tom Clarkson ZL2AZ received MBE in Birthday Honours List for services to amateur radio.
New Frequency Allocation List gives extended band at 1.8MHz, and new bands above 47GHz, Grade II and Novice Bands at 28MHz. CW or Phone, CW identification by RTTY operators no longer a regulatory requirement. Bandplans and emissions for the Amateur Service to regulate.
Packet radio used in New Zealand by ZLs 1AOX, 1WN, 1UFK.
World record for packet radio by ZL1AOX and W3I0I on 28MHz band.
First NZ to Chatham Islands contacts on 144MHz band by ZL4OY/C and ZL3AR.
First ZL-ZL moon bounce contact between ZL3AAD and ZL2AQE on the 432MHz band on July 16.
A similar feat achieved on August 15 on the 1296 MHz band.
First 610 MHz contact in ZL by ZL2AQF and ZL2ARW on December 3, between Mt. Kaukau and Kakanui.
World Amateur Radio International Conference (WARIC) held in Tokyo.

1984 Chatham, Kermadec, and Auckland/Campbell Islands became ZL7, ZL8, and ZL9 respectively.
Review of Amateur Service by NZPO.
Morse transmission authorized for Grade III operators.
First operation from the top of Mt. Cook (ZL3TIG, hand held 2m).

1985 18.068MHz band made available.
Karl Meinzer DJ4ZC guest speaker at Conference in Christchurch.
Sixth IARU Region III Association Conference, at Auckland, with visit by IARU President and ITU General-Secretary.
IARU Administrative Council met in Auckland.
First FK8-ZL contact on 144MHz, by ZL2TPY and FK8EM.

1986 NZART Official Broadcast simulcasted on 3900kHz and on Amateur TV for the first time.
Amendment to Radio Regulations from 21 July established General, Limited, and Novice Licence grades. Morse test to include figures. Provisions made for credit for partial exam passes. Power measurement changed to mean/PEP output power rating. Logbook not now obligatory but recommended. Licence fee increased to $25.00 plus GST.
First 6m packet radio contact with VK, ZL2BKC and VK2YME.

1987 Examination became all multi-choice questions.
Official Broadcast networking on 3900kHz and VHF repeaters commenced.
New Zealand Post Office replaced on 1 April 1987 by the New Zealand Radio Frequency Service as Administration for New Zealand. Licence Fee made $35 plus GST.
24.89 to 24.99MHz band available.
610-620MHz band extended to 622MHz.
A ZL amateur attends IARU Administrative Council meeting for first time (Netherlands-ZL2AMJ).
National link-Auckland-Wellington-opened, later extended to Christchurch.
JOTA provisions for Scout and Guide Camp stations during World Jamboree.
First ZL 2304MHz E-M-E contact, ZL2AQE and W3IWI, world record.

1988 New Radio Regulations from 1 January 1988.
Third-Party Welfare Traffic permitted for the first time for aftermath of March North Island storm disaster (Cyclone Bola).
W6SAI guest speaker at conference.
80m Novice band extended to 3.625MHz.
14-year age limit for Amateur Licence dropped.
April 23, first North Island South Island contact on 610MHz band, ZL2AJI Mt Robert, ZL2UGR Mt Taranaki.
Seventh IARU Region III Association Conference, Seoul.
First southern hemisphere to northern hemisphere 6m E-M-E contact, ZL2BGJ and W6JKV.
World record 6m E-M-E contact, ZL2BGJ and WA4NJP.

1989 ZM prefix permitted from June 1989 to end of 1990 for XIV Commonwealth Games and New Zealand's 150th Year Celebrations.
Dan Wilkinson ZL2AB received QSM in Birthday Honours List for services to Amateur Radio.
NZART makes written and verbal submissions to a Parliamentary Select Committee for the first time. (Radiocommunications Bill).

International Amateur Radio Union

(Prepared by the NZART Overseas Committee)

You, a radio amateur, should be familiar with these two international bodies:

The International Telecommunication Union

The ITU is the highest authority for the regulation of all radio services. It is recognised by the United Nations as the specialised agency responsible for the control of telecommunications. Its Convention has the status of a treaty which is binding on all nations which sign it.

One hundred and sixty nations are members of the ITU.

New Zealand is a member and the NZ Radio Frequency Service is the administration department which represents New Zealand in ITU affairs.

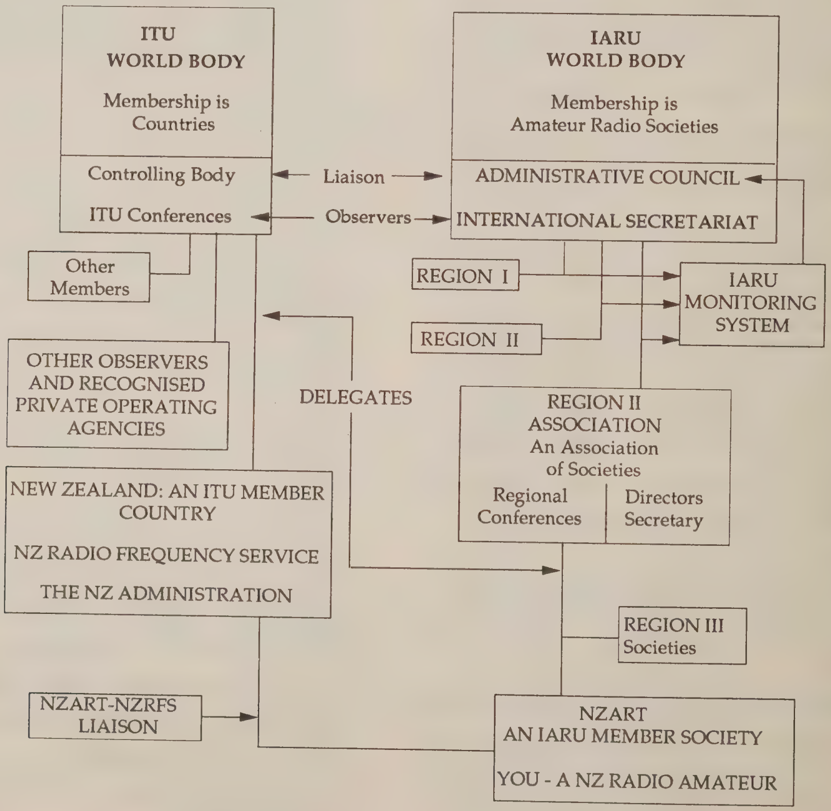
The ITU maintains and extends international co-operation for the improvement and rational use of telecommunications of all kinds; promotes the development of technical facilities and efficient operation of telecommunications services; and harmonises the actions of all nations to attain these ends.

The ITU has its headquarters in Geneva, and holds frequent conferences concerning some or all of the radio services. The Amateur Service (which includes the Amateur Satellite Service) is of most interest to us, but the activities of the other services have also to be closely monitored.

The conclusions reached by ITU conferences are the basis for international and national radio regulations.

The World Administrative Radio Conference held in Geneva in 1979 (WARC-79) gave rise to the ITU Radio Regulations 1982, further revised by the 1983 WARC for the Mobile Services, and now form the ITU Radio Regulations 1985.

All radio services within the borders of New Zealand are controlled by the New Zealand Radio Regulations, Telecommunications Act, and Radio Communications Act, and these reflect the ITU Radio Regulations.



The International Amateur Radio Union

The IARU is a voluntary union of amateur radio societies and was founded in 1925. NZART was a founder member, and is still a member, with more than 125 other societies. The prime purpose of IARU is the protection of the Amateur Service.

The IARU is controlled by an Administrative Council (AC) which is composed of a President, Vice-President and two representatives from each of the three ITU regions:

1. Region I is Europe, the USSR and Africa,
2. Region II is the Americas, and
3. Region III is the rest of the world.

An International Secretariat (IS) provides the Secretary and administrative services. Any amateur radio society can be nominated to provide the IS; it then has the privilege of nominating the president and Vice-President. Currently the American Radio Relay League (ARRL) is the IS society.

The "Business" of IARU is transacted at a series of triennial regional conferences arranged so that one is held each year. The member-societies of the region meet at these regional conferences to discuss common problems, to find solutions, to determine policy, and to otherwise promote the viability of amateur radio in the region. Each individual IARU member society provides input to the international scene through the mechanism of the regional conferences.

New Zealand is in Region III, and NZART is a founder member of the IARU Region III Association, founded in 1968. The Association Secretariat is in Tokyo. Between conferences the affairs of the region are attended to by the Association's five Directors who are elected at the regional conference to serve until the next conference. NZART is a very active member of the Region III Association.

Links and Recognition

IARU enjoys "recognition" by the ITU and can be admitted to ITU conferences with "observer" status. This is of tremendous significance because it provides the opportunity to contribute to and to even directly influence what is done by the national delegations at ITU conferences. The IARU is usually directly represented at ITU conferences by a specially selected "Observer Team' drawn from specialists in amateur radio affairs from IARU societies worldwide.

In addition IARU has an indirect influence through members of national delegations who are also radio amateurs.

For some important conferences (e.g. WARC-79), a representative of the Amateur Service has been included in some national delegations to ITU conferences. NZART financed a representative in New Zealand's delegation to WARC-79. This is a task that will need repeating for a forthcoming conference. The training of suitable people has already commenced and budgeting is planned.

NZART has access to the New Zealand administration via the NZART-Administration Liaison Officer, and from there to the ITU. A first objective for NZART is to deserve and keep the goodwill of the New Zealand Radio Frequency Service (NZRFS), hence to continue the enlightened official attitude New Zealand radio amateurs have enjoyed in the past, to ensure that official New Zealand influence in ITU circles will be in the right direction.

In addition, through the IARU Region III Association, NZART is able to assist other societies in an effort to have the right things for amateur radio done by their administrations.

International problems for Amateur Radio

All classes of radio service compete to get their share of the radio frequency spectrum which is a shared resource. Most services wield very strong influence through government representatives at ITU conferences where decisions are affected by many factors, political, economic and social. At times the atmosphere is hostile to amateur radio. Some decisions take many years to implement. The patient pursuit of long-term policies is needed to promote the future welfare of the Amateur Service.

Some Services (broadcasting is a typical example) have great resources, money and political influence. The Amateur Service by contrast must rely entirely on support from national amateur radio societies through national administrations and by IARU Observers at conferences.

The cost of this continuing vigilance is high and comes from radio amateurs in national societies and from devoted voluntary efforts by amateur radio specialists. It is an ongoing problem and your support is important.

Where Do I Fit In?

As a radio amateur, your NZART Membership is vital to all of us. Membership of NZART, and through that your support to the NZART-NZRFS Liaison and overseas liaison, is vital. It is essential to all the other radio amateurs that you be a member. You are playing your part to ensure the continuance of amateur radio for everybody. You should be encouraging every other radio amateur to belong and help with the work too

Remember, there is no actual security for the Amateur Service. Constant vigilance, time and money to protect our regulatory provisions are needed.

International Amateur Radio Union

Administrative Council
Richard L. Baldwin, W1RU-President, IARU
Michael J. Owen, VK3KI-Vice President, IARU
Larry E. Price, W4RA-Secretary, IARU
L. v. d. Nadort, PA0LOU-Chairman, IARU Region I Division
John Allaway, G3FKM-Secretary, IARU Region I Division
Alberto Shaio, HK3DEU-President, IARU Region II
Thomas B. J. Atkins, VE3CDM-Secretary, IARU Region II
David Rankin, 9V1RH-Chairman, IARU Region III Association
D. D. Devan, 9M2DD-Director, IARU Region III Association
(Region III has a policy of rotating its members of the AC to give all directors experience)

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Contribute to the NZART WARC FUND NOW!

International Amateur Radio Union—List of Member Societies

16 February 1990

ALGERIA: Amateurs Radio Algeriens (ARA)
ANDORRA: Unio Radioaficionats Andorrans (URA)
ANGOLA: Liga dos Amadores de Radio de Angola (LARA)
ANTIGUA AND BARBUDA: Antigua and Barbuda Amateur Radio Society (ABARS).
ARGENTINA: Radio Club Argentino (RCA)
ARUBA: Aruba Amateur Radio Club (AARC)
AUSTRALIA: Wireless Institute of Australia (WIA)
AUSTRIA: Osterreichischer Versuchssenderverband (OVSV).
BAHAMAS: Bahamas Amateur Radio Society (BARS)
BAHRAIN: Amateur Radio Association Bahrain (ARAB)
BANGLADESH: Bangladesh Amateur Radio League (BARL).
BARBADOS: Amateur Radio Society of Barbados (ARSB).
BELGIUM: Union Belge des Amateurs-Emetteurs/Unie van de Belgische Amateur-Zenders (UBA)/Union der Belgischen Amateurfunker.
BELIZE: Belize Amateur Radio Club (BARC).
BERMUDA: Radio Society of Bermuda (RSB).
BOLIVIA: Radio Club Boliviano (RCB).
BOTSWANA: Botswana Amateur Radio Society (BARS).
BRAZIL: Liga de Amadores Brasileiros de Radio Emissao (LABRE).
BRITISH VIRGIN ISLANDS: British Virgin Islands Radio League (BVIRL).
BRUNEI: Negara Brunei Darussalam Amateur Radio Association (BDARA).
BULGARIA: Bulgarian Federation of Radio Amateurs (BFRA).
BURMA/MYANMAR: Burma Amateur Radio Transmitting Society (BARTS).
CANADA: Canadian Radio Relay League (CRRL).
CAYMAN ISLANDS: Cayman Amateur Radio Society (CARS).
CHILE: Radio Club de Chile (RCCH).
CHINA: Chinese Radio Sports Association (CRSA).
COLOMBIA: Liga Columbiana de Radioaficionados (LCRA).
COSTA RICA: Radio Club de Costa Rica (RCCR).
CUBA: Federacion de Radioaficionadoes de Cuba (FRC).
CYPRUS: Cyprus Amateur Radio Society (CARS).
CZECHOSLOVAKIA: Central Radio Club of Czechoslovakia (CRRC).
DENMARK: Eksperimenterende Danske Radioamatorer (EDR).
DJIBOUTI: Association des Radioamateurs de Djibouti (ARAD).
DOMINICAN REPBUBLIC: Radio Club Dominicano (RCD).
DOMINICA, COMMONWEALTH OF: Dominica Amateur Radio Club (DARC).
EQUADOR: Guayaquil Radio Club (GRC).
EGYPT: Egypt Amateur Radio Society (EARS).
EL SALVADOR: Club de Radio Aficionados de El Salvador (CRAS).
FAROE ISLANDS: Faroes Radio Amateurs (FRA).
FIJI: Fiji Association of Radio Amateurs (FARA).
FINLAND: Suomen Radioamatooriliitto (SRAL).
FRANCE: Reseau des Emetteurs Francais (REF).
FRENCH POLYNESIA: Club Oceanien de Radio et d'Astronomie (CORA).
GABON: Association Gabonaise des Radio-Amateurs (AGRA).
GAMBIA: Radio Society of The Gambia (RSTG).
GERMANY: (Democratic Republic of): Radiosportverband der D.D.R. (RSV).
GERMANY: (Federal Republic of): Deutscher Amateur-Radio-Club (DARC).
GHANA: Ghana Amateur Radio Society (GARS).
GIBRALTAR: Gibraltar Amateur Radio Society (GARS).
GREECE: Radio Amateur Association of Greece (EEP).
GRENADA: Grenada Amateur Radio Club (GARC).
GUATEMALA: Club de Radioaficionados de Guatemala (CRAG)
GUYANA: Guyana Amateur Radio Association (GARA).
HAITI: Radio Club d'Haiti (RCH).
HONDURAS: Radio Club de Honduras (RCH).
HONG KONG: Hong Kong Amateur Radio Transmitting Society (HARTS).
HUNGARY: Magyar Radioamator Szovetseg (MRASZ).
ICELAND: Islenzkir Radioamatorar (IRA).
INDIA: Amateur Radio Society of India (ARSI).
INDONESIA: Organisasi Amatir Radio Indonesia (ORARI).
IRELAND: Irish Radio Transmitters Society (IRTS).
ISRAEL: Israel Amateur Radio Club (IARC).
ITALY: Associazione Radioamatori Italiani (ARI).
IVORY COAST: Association der Radio-Amateurs Ivoiriens (ARAI)
JAMAICA: Jamaica Amateur Radio Association (JARA).
JAPAN: Japan Amateur Radio League (JARL).
JORDAN: Royal Jordanian Radio Amateur Society (RJRAS).
KENYA: Radio Society of Kenya (RSK).
KOREA: Korean Amateur Radio League (KARL).
KUWAIT: Kuwait Amateur Radio Society (KARS).
LEBANON: Association des Radio-Amateurs Libanais (RAL).
LESOTHO: Lesotho Amateur Radio Society (LARS).
LIBERIA: Liberia Radio Amateur Association (LRAA).
LIECHTENSTEIN: Amateurfunk Verein Liechtenstein (AFVL).
LUXEMBOURG: Reseau Luxembourgeois des Amateurs d'Ondes Courtes (RL).
MALAYSIA: Malaysian Amateur Radio Transmitters' Society (MARTS).
MALTA: Malta Amateur Radio League (MARL).
MAURITIUS: Mauritius Amateur Radio Society (MARS).
MEXICO: Federacion Mexicana deRadio Experimentadores (LMRE).
MONACO: Association des Radio-Amateurs de Monaco (ARM).
MONTSERRAT: Montserrat Amateur Radio Society (MARS).
MOROCCO: Association Royale des Radio-Amateurs du Maroc (ARRAM).
MOZAMBIQUE: Liga dos Radio Emissores de Mocambique (LREM).
NETHERLANDS: Vereniging voor Experimenteel Radio Onderzoek in Nederland (VERON).
NETHERLANDS ANTILLES: Vereniging voor Experimenteel Radio Onderzoek in Nederlandse Antillen (VERONA).
NEW ZEALAND: New Zealand Association of Radio Transmitters (NZART).
NICARAGUA: Club de Radioexperimentadores de Nicaragua (CREN).
NIGERIA: Nigerian Amateur Radio Society (NARS).
NORWAY: Norsk Radio Relae Liga (NRRL).
OMAN: Royal Omani Amateur Radio Society (ROARS).
PAKISTAN: Pakistan Amateur Radio Society (PARS).
PANAMA: Liga Panamena de Radio aficonados (LPRA).
PAPUA NEW GUINEA: Papua New Guinea Amateur Radio Society (PNGARS).
PARAGUAY: Radio Club Peruaro (RCP).
PERU: Radio Club Paraguayo (RCP).
PHILIPPINES: Philippine Amateur Radio Association (PARA).
POLAND: Polski Zwiazek Krotkofalowcow (PZK).
PORTUGAL: Rede dos Emissores Portugueses (REP).
ROMANIA: Federatia Romana de Radioamatorism (FRR).
SAN MARINO: Associazione Radioamatori della Repubblica di San Marino (ARRSM).
SENEGAL: Association des Radio-Amateurs du Senegal (ARAS).
SIERRA LEONE: Sierra Leone Amateur Radio Society (SLARS).
SINGAPORE: Singapore Amateur Radio Transmitting Society (SARTS).
SOLOMON ISLANDS: Solomon Islands Radio Society (SIRS).
SOUTH AFRICA: South African Radio League (SARL).
SPAIN: Union de Radioaficionados Espanoles (URE).
SRI LANKA: Radio Society of Sri Lanka (RSSL).
SURINAME: Vereniging van Radio Amateurs in Suriname (VRAS).
SWAZILAND: Radio Society of Swaziland (RSS).
SWEDEN: Foreningen Sveriges Sandareamatorer (SSA).
SWITZERLAND: Union Schweizerischer Kurzwellen-Amateure (USKA).
SYRIA: Technical Institute of Radio (TIR).
THAILAND: Radio Amateur Society of Thailand (RAST).
TONGA: Amateur Radio Club of Tonga (ARCOT).
TRINIDAD AND TOBAGO: Trinidad and Tobago Amateur Radio Society (TTARS).
TURKEY: Telsiz Radyo amatorleri Cemiyeti (TRAC).
UNITED KINGDOM: Radio Society of Great Britain (RSGB).
URUGUAY: Radio Club Uruguayo (RCU).
USA: American Radio Relay League (ARRL).
USSR: Radio Sport Federation of the USSR (RSF).
VANUATU: Vanuatu Amateur Radio Society (VARS).
VENEZUELA: Radio Club Venezolano (RCV).
WESTERN SAMOA: Western Samoa Amateur Radio (WSARC).
YUGOSLAVIA: Savez Radio-Amatera Jugoslavije (SRJ).
ZAIRE: Union Zairoise des Radio-Amateurs (UZRA).
ZAMBIA: Radio Society of Zambia (RSZ).
ZIMBABWE: Zimbabwe Amateur Radio Society (ZARS).

International Amateur Radio Union—Amateur Radio Licensing Status

31 January, 1990

Region I

Country	Total Stations	Total Operators	Society Members	Licensed Members	Data Year
Algeria	109	190	3500	190	87
Andorra	98	152	108	96	85
Angola	Information Not Available				
Austria	4200	4600	3650	?	89
Bahrain	35	34	50	34	87
Belgium	4980	4880	3915	2725	89
Botswana	37	37	22	18	86
Bulgaria	983	983	983	983	85
Cyprus	456	450	185	180	89
Czechoslovakia	2850	2738	9628	2738	89
Denmark	10105	10105	5217	4300	88
Djibouti	17	20	19	17	86
Egypt	14	22	25	22	89
Faroe Islands	105	102	122	72	89
Finland	3931	3820	5006	3820	89
France	14579	14134	9527	7685	89
Gabon	21	21	24	21	89
Gambia	35	33	26	25	85
German Democratic Republic	2089	3685	25566	3685	89
Federal Republic of Germany	59931	58144	50365	42770	89
Ghana	Information Not Available				
Gibraltar	21	20	25	20	88
Greece	1007	1000	1032	849	89
Hungary	4643	4204	9647	4204	89
Iceland	119	?	153	91	79
Ireland	1412	1560	699	611	87
Israel	528	523	652	523	89
Italy	28004	28000	17109	11900	89
Ivory Coast	201	201	301	201	88
Jordan	120	119	119	119	82
Kenya	56	55	95	50	89
Kuwait	130	129	119	105	89
Lebanon	47	47	29	29	88
Lesotho	20	19	14	14	89
Liberia	99	101	101	101	89
Liechenstein	16	15	19	11	89
Luxembourg	426	431	340	281	89
Malta	273	295	128	90	88
Mauritius	42	41	41	41	89
Monaco	53	52	31	30	86
Morocco	51	174	174	174	89
Mozambique	Information Not Available				
Netherlands	15439	15321	11100	8300	89
Nigeria	102	109	2845	109	89
Norway	5619	5454	3394	3019	89
Oman	50	48	98	48	89
Poland	8083	7420	9550	7420	89
Portugal	2514	2500	1200	1100	88
Romania	1293	983	7964	983	88
San Marino	50	49	42	42	89
Senegal	173	172	172	172	88
Sierra Leone	27	29	56	23	87
South Africa	4721	4691	2716	1994	89
Spain	40848	40689	19246	15954	89
Swaziland	Information Not Available				
Sweden	11079	10563	6848	6494	88
Switzerland	4440	4440	4556	3576	89
Syria	3	9	13	9	89
Turkey	108	100	378	100	89
USSR	52241	64002	142978	11761	89
United Kingdom	55000	54000	36971	30115	88
Yugoslavia	4643	3888	19500	3888	
Zaire	Information Not Available				
Zambia	29	29	32	29	87
Zimbabwe	105	101	138	88	86
Total	**348410**	**355852**	**418563**	**187049**	
Average	**5807**	**5931**	**6976**	**3117**	

Region II

Country	Total Stations	Total Operators	Society Members	Licensed Members	Data Year
Antigua & Barbuda	19	25	16	12	88
Argentina	?	23450	2000	?	89
Aruba	25	49	22	18	87
Bahamas	?	?	14	11	88
Barbados	200	200	80	60	78
Nelize	122	122	122	122	84
Bermuda	100	100	120	90	89
Bolivia	2100	2087	2087	2087	87
Brazil	26100	25686	11946	10274	89
Br. Virgin Islands	9	9	10	9	79
Canada	23703	?	5524	5524	89
Cayman Islands	28	28	22	22	85
Chile	7620	9232	2000	1800	87
Colombia	4000	7000	2000	2000	85
Costa Rica	1707	1951	297	253	86
Cuba	690	653	653	653	89
Commonwealth of Dominica	36	35	90	35	88
Dominican Republic	3705	3700	320	320	86
Ecuador	1685	1775	1775	1775	88
El Salvador	604	600	172	170	89
Grenada	20	?	43	30	83
Guatemala	350	350	150	150	85
Guyana	Information Not Available				
Haiti	18	19	19	19	78
Honduras	?	?	110	80	83
Jamaica	60	80	68	46	89
Mexico	4996	4910	1158	1158	88
Montserrat	30	30	26	26	85
Netherland Antilles	61	60	43	43	89
Nicaragua	100	115	80	80	85
Panama	750	750	400	400	83
Paraguay	890	1300	585	499	85
Peru	2366	2355	801	696	89
Suriname	73	72	62	62	88
Trinidad & Tobago	201	200	216	164	87
USA	467305	464800	153325	142572	89
Uruguay	?	3015	525	525	88
Venezuela	5100	11213	1800	1800	89
Total	**581000**	**590000**	**188681**	**175585**	
Average	**16000**	**15900**	**5099**	**4746**	

Region III

Australia	17915	17465	7650	6920	89
Bangladesh	0	0	30	0	83
Brunei	119	111	85	80	88
China	24	60	484	60	88
Fiji	19	17	17	17	89
French Polynesia	182	?	130	120	84
Hong Kong	398	390	293	267	87
India	2875	2800	973	971	88
Indonesia	60280	60000	72000	60000	88
Japan	951937	?	153111	151951	89
Korea	2865	5864	2600	1600	89
Malaysia	180	246	346	150	88
Myanmar/Burma	Information Not Available				
New Zealand	6264	6106	3209	2812	89
Pakistan	80	80	42	18	87
Papua New Guinea	131	126	52	48	87
Philippines	850	835	3286	835	88
Singapore	58	56	43	43	85
Solomon Islands	8	7	7	7	89
Sri Lanka	130	127	297	89	89
Thailand	202	200	700	200	88
Tonga	?	19	28	8	82
Vanuatu	25	23	24	20	87
Western Samoa	12	11	11	11	89
Total	**1044573**	**1021106**	**245418**	**226227**	
Average	**45416**	**44396**	**10670**	**9836**	

Worldwide

Total	**1974000**	**1967000**	**852000**	**589000**
Average	**16500**	**16400**	**7100**	**4900**

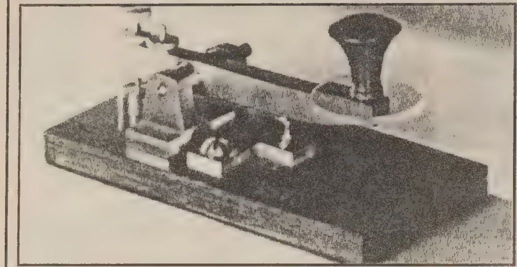
Allocation of International Callsigns

AAA-ALZ	United Sates of America
AMA-AOZ	Spain
APA-ASZ	Pakistan (Islamic Republic of)
ATA-AWZ	India
AXA-AXZ	Australia
AYA-AZZ	Argentine Republic
A2A-A2Z	Botswana
A3A-A3Z	Tonga (Kingdom of)
A4A-A4Z	Oman (Sultinate of)
A5A-A5Z	Bhutan (Kingdom of)
A6A-A6Z	United Arab Emirates
A7A-A7Z	Qatar (State of)
A8A-A8Z	Liberia (Republic of)
A9A-A9Z	Bahrain (State of)
BAA-BZZ	China (Peoples' Republic of)
CAA-CEZ	Chile
CFA-CKZ	Canada
CLA-CMZ	Cuba
CNA-CNZ	Morocco (Kingdom of)
COA-COZ	Cuba
CPA-CPZ	Bolivia (Republic of)
CQA-CUZ	Portugal
CVA-CXZ	Uruguay (Oriental Republic of)
CYA-CZZ	Canada
C2A-C2Z	Nauru
C3A-C3Z	Andorra (Principality of)
C4A-C4Z	Cyprus
C5A-C5Z	Gambia (Republic of the)
C6A-C6Z	Bahamas (Commonwealth of the)
C7A-C7Z	World Meteorological Organisation
C8A-C97	Mozambique (Peoples' Republic of)
DAA-DRZ	Germany (Federal Republic of)
DSA-DTZ	Korea (Republic of)
DUA-DZZ	Philippines (Republic of the)
D2A-D3Z	Angol (People's Republic of)
D4A-D4Z	Cape Verde (Republic of)
D5A-D5Z	Liberia (Republic of)
D6A-D6Z	Comoros (Federal and Islamic Republic)
D7A-D9Z	Korea (Republic of)
EAA-EHZ	Spain
EIA-EJZ	Ireland
EKA-EKZ	Union of Soviet Socialist Republics
ELA-ELZ	Liberia (Republic of)
EMA-EOZ	Union of Soviet Socialist Republics
EPA-EQZ	Iran (Islamic Republic of)
ERA-ESZ	Union of Soviet Socialist Republics
ETA-ETZ	Ethiopia
EUA-EWZ	Byelorussian Soviet Socialist Republic
EXA-EZZ	Union of Soviet Socialist Republics
FAA-FZZ	France
GAA-GZZ	Great Britain and Northern Ireland
HAA-HAZ	Hungarian Peoples' Repbublic
HBA-HBZ	Switzerland (Confederation of)
HCA-HDZ	Ecuador
HEA-HEZ	Switzerland (Confederation of)
HFA-HFZ	Poland (Peoples' Republic of)
HGA-HGZ	Hungarian Peoples' Republic
HHA-HHZ	Haiti (Republic of)
HIA-HIZ	Dominican Republic
HJA-HKZ	Colombia (Republic of)
HLA-HLZ	Korea (Republic of)
HMA-HMZ	Korea (Democratic Peoples' Republic of)
HNA-HNZ	Iraq (Republic of)
HOA-HPZ	Panama (Republic of)
HQA-HRZ	Honduras (Republic of)
HSA-HSZ	Thailand
HTA-HTZ	Nicaragua
HUA-HUZ	El Salvador (Republic of)
HVA-HVZ	Vatican City State
HWA-HYZ	France
HZA-HZZ	Saudi Arabia (Kingdom of)

H2A-H2Z	Cyprus
H3A-H3Z	Panama (Republic of)
H4A-H4Z	Solomon Islands
H6A-H7Z	Nicaragua
H8A-H9Z	Panama (Republic of)
IAA-IZZ	Italy
JAA-JSZ	Japan
JTA-JVC	Mongolian Peoples' Republic
JWA-JXZ	Norway
JYA-JYZ	Jordan (Hashemite Kingdom of)
JZA-JZZ	Indonesia (Republic of)
J2A-J2Z	Djibouti (Republic of)
J3A-J3Z	Grenada
J4A-J4Z	Greece
J5A-J5Z	Guinea-Bisseau (Republic of)
J6A-J6Z	Saint Lucia
J7A-J7Z	Dominica
J8A-J8Z	St. Vincent and Grenadines
KAA-KZZ	United States of America
LAA-LNZ	Norway
LOA-LWZ	Argentine Republic
LXA-LXZ	Luxembourg
LYA-LYZ	Union of Soviet Socialist Republics
LZA-LZZ	Bulgaria (Peoples' Republic of)
LZA-LZZ	Bulgaria (Peoples' Republic of)
L2A-L9Z	Argentine Republic
MAA-MZZ	Great Britain and Northern Ireland
NAA-NAA	United States of America
OAA-OCZ	Peru
ODA-ODZ	Lebanon
OEA-OEZ	Austria
OFA-OJZ	Finland
OKA-OMZ	Czechoslovakia Socialist Republic
ONA-OTZ	Belgium
OUA-OZZ	Denmark
PAA-PIZ	Netherlands (Kingdom of the)
PJA-PJZ	Netherlands Antilles
PKA-POZ	Indonesia (Republic of)
PPA-PYZ	Brazil (Federative Republic of)
PZA-PZZ	Suriname (Republic of)
P2A-P2Z	Papua New Guinea
P3A-P3Z	Cyprus
P4A-P4Z	Aruba
P5A-P9Z	Korea (Democratic Peoples' Republic of)
QAA-QZZ	(Service abbreviations)
RAA-RZZ	Union of Soviet Socialist Republics
SAA-SMZ	Sweden
SNA-SRZ	Poland (Peoples' Republic of)
SSA-SSM	Egypt (Arab Republic of)
SSN-STZ	Sudan (Democratic Republic of the)
SUA-SUZ	Egypt (Arab Republic of)
SVA-SZZ	Greece
S2A-S3Z	Bangladesh (People's Republic of)
S6A-S6Z	Singapore (Republic of the)
S7A-S7Z	Seychelles
S9A-SPZ	Sao Tome and Principe (Democratic Republic of)
TAA-TCZ	Turkey
TDA-TDZ	Guatemala (Republic of)
TEA-TEZ	Costa Rica
TFA-TFZ	Iceland
TGA-TGZ	Guatemala (Republic of)
THA-THZ	France
TIA-TIZ	Costa Rica
TJA-TJZ	Cameroon (United Republic of)
TKA-TKZ	France
TLA-TLZ	Central African Republic

TMA-TMZ	France
TNA-TNZ	Congo (People's Republic of)
TOA-TQZ	France
TRA-TRZ	Gabon Republic
TSA-TSZ	Tunisia
TTA-TTZ	Chad (Republic of the)
TUA-TUZ	Ivory Coast (Republic of)
TVA-TXZ	France
TYA-TYZ	Benin (Peoples' Republic of)
TZA-TZZ	Mali (Republic of)
T2A-T2Z	Tuvalu
T3A-T3Z	Kiribati Republic
T4A-T4Z	Cuba
T5A-T5Z	Somali Democratic Republic
T6A-T6Z	Afghanistan (Democratic Republic of)
T7A-T7Z	Republic of San Marino
UAA-UQZ	Union of Soviet Socialist Republics
URA-UTZ	Ukrainian Soviet Socialist Republic
UUA-UZZ	Union of Soviet Socialist Republics
VAA-VGZ	Canada
VHA-VNZ	Australia
VOA-VOZ	Canada
VPA-VSZ	Great Britain and Northern Ireland
VTA-TWZ	India
VXA-VYZ	Canada
VZA-VZZ	Australia
V2A-V2Z	Antigua and Barbuda
V3A-V3Z	Belize
V4A-V4Z	St. Christopher and Nevis
V8A-V8Z	Brunei
WAA-WZZ	United States of America
XAA-XIZ	Mexico
XJA-XOZ	Canada
XPA-XPZ	Denmark
XQA-XRZ	Chile
XSA-XSZ	China (Peoples' Republic of)
XTA-XTZ	Burkina Faso
XUA-XUZ	Kampuchea (Democratic)
XVA-XVZ	Vietnam (Socialist Republic of)
XWA-XWZ	Laos Peoples' Democratic Republic
XXA-XXZZ	Portugal
XYA-XZZ	Burma (Socialist Republic of the Union of)
YAA-YAZ	Afghanistan (Democratic Republic of)
YBA-YHZ	Indonesia (Republic of)
YIA-YIZ	Iraq (Republic of)
YJA-YJZ	Vanuatu
YKA-YKZ	Syrian Arab Republic
YLA-YLZ	Union of soviet Socialist Republics
YMA-YMZ	Turkey
YNA-YNZ	Nicaragua
YOA-YRZ	Romania (Socialist Republic of)
YSA-YSZ	El Salvador (Republic of)
YTA-YUZ	Yugoslavia (Social Federal Republic of)
YVA-YYZ	Venezuela (Republic of)
YZA-YZZ	Yugoslavia (Socialist Federal Republic of)
YSA-Y9Z	German Democratic Republic
ZAA-ZAZ	Albania (Socialist Peoples' Republic of)
ZBA-ZJZ	Great Britain and Northern Ireland
ZKA-ZMZ	New Zealand
ZNA-ZOZ	Great Britain and Northern ireland
ZPA-ZPZ	Paraquay (Republic of)
ZQA-ZQZ	Great Britain and Northern Ireland
ZRA-ZUZ	South Africa (Republic of)
ZVA-ZZZ	Brazil (Federative Republic of)
Z2A-Z2Z	Republic of Zimbabwe
2AA-2ZZ	Great Britain and Northern Ireland
3AA-3AZ	Monaco
3BA-3BZ	Mauritius
3CA-3CZ	Equatorial Guinea (Republic of)
3DN-3DZ	Swaziland (Kingdom of)
3DN-3DZ	Fiji
3EA-3FZ	Panama (Republic of)
3GA-3GZ	Chile
3HA-3UZ	China (People's Republic of)
3VA-3VZ	Tunisia
3WA-3WZ	Vietnam (Socialist Republic of)
3XA-3XZ	Guinea (Revolutionary peoples' Republic of)
3YA-3YZ	Norway
3ZA-3ZZ	Poland (Peoples' Republic of)
4AA-4CZ	Mexico
4DA-4IZ	Philippines (Republic of the)
4JA-4LZ	Union of Soviet Socialist Republics
4MA-4MZ	Venezuela (Republic of)
4NA-4OZ	Yugoslavia (Social Federal Republic of)
4PA-4SZ	Sri Lanka (Democratic Socialist Republic)
4TA-4TZ	Peru
4UA-4UZ	United Nationals Organisation
4VA-4VZ	Haiti (Republic of)
4WA-4WZ	Yemen Arab Republic
4XA-4XZ	Israel (State of)
4YA-4YZ	International Civil Aviation Organisation
4ZA-4ZZ	Israel (State of)
5AA-5AZ	Libya (Socialist Peoples' Libyan Arab Jamahiriya)
5BA-5BZ	Cyprus
5CA-5GZ	Morocco (Kingdom of)
5HA-5IZ	Tanzania (United Republic of)
5JA-5KZ	Colombia (Republic of)
5LA-5MZ	Liberia (Republic of)
5NA-5OZ	Nigeria (Federal Republic of)
5PA-5QZ	Denmark
5RA-5SZ	Madagascar (Democratic Republic of)
5TA-5TZ	Mauritania (Islamic Republic of)
5UA-5UZ	Niger (Republic of the)
5VA-5VZ	Togolese Republic
5WA-5WZ	Western Samoa
5XA-5XZ	Uganda (Republic of)
5YA-5ZZ	Kenya (Republic of)
6AA-6BZ	Egypt (Arab Republic of)
6CA-6CZ	Syrian Arab Republic
6DA-6JZ	Mexico
6KA-6NZ	Korea (Republic of)
6OA-6OZ	Somali Democratic Republic
6PA-6SZ	Pakistan (Islamic Republic of)
6TA-6UZ	Sudan (Democratic Republic of the)
6VA-6WZ	Senegal (Republic of the)
6XA-6XZ	Madagascar (Democratic Republic of)
6YA-6YZ	Jamaica
6ZA-6ZZ	Liberia (Republic of)
7AA-712	Indonesia (Republic of)
7JA-7NZ	Japan
7OA-7OZ	Yemen (Peoples' Democratic Republic of)
7PA-7PZ	Lesotho (Kingdom of)
7QA-7QZ	Malawi (Republic of)
7RA-7RZ	Algeria (Algerian Democratic and Popular Republic)
7SA-7SZ	Sweden
7TA-7YZ	Algeria (Algerian Democratic and Popular Republic)
7ZA-7ZZ	Saudi Arabia (Kingdom of)
8AA-8IZ	Indonesia (Republic of)
8JA-8NZ	Japan
8OA-8OZ	Botswana (Republic of)
8PA-8PZ	Barbadoes
8QA-8QZ	Maldives (Republic of)
8RA-8RZ	Guyana
8SA-8SZ	Sweden
8TA-8YZ	India
8ZA-8ZZ	Saudi Arabia (Kingdom of)
9BA-9DZ	Iran (Islamic Republic of)
9EA-9FZ	Ethiopia
9GA-9GZ	Ghana
9HA-9HZ	Malta
9IA-9JZ	Zambia (Republic of)
9KA-9KZ	Kuwait (State of)
9LA-9LZ	Sierra Leone
9MA-9MZ	Malaysia
9NA-9NZ	Nepal
9OA-9TZ	Zaire (Republic of)
9UA-9UZ	Burundi (Republic of)
9VA-9VZ	Singapore (Republic of)
9WA-9WZ	Malaysia
9XA-9XZ	Rwanda (Republic of)
9YA-9ZZ	Trinidad and Tobago

SUPREME MORSE KEYS



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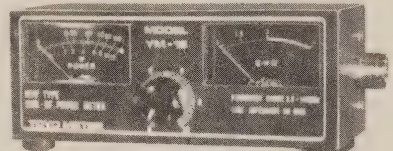

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SWR and POWER METER—Model YM-1E
3.5–144MHz

$146.00

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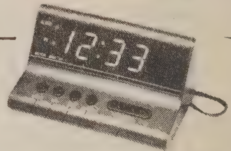
24-HR DIGITAL DESK CLOCKS



Tricity House Price **$35.85**

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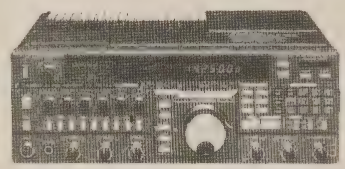
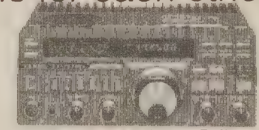
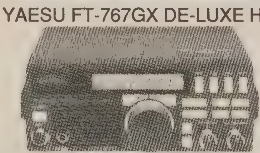


YAESU FT-767GX DE-LUXE HF TRANSCEIVER



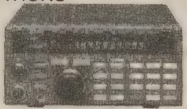
YAESU FT-757 GXII
HF TRANSCEIVER FOR
HOME AND MOBILE
APPLICATIONS

YAESU FRG-8800
SHORTWAVE MW AND SHORTWAVE
GENERAL COVERAGE RECEIVER

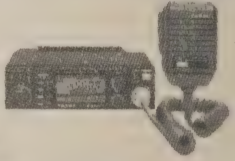


YAESU FT-747GX
ECONOMY HF TRANSCEIVER

YAESU FT-4700RH
VHF/UHF HOME
STATION MOBILE SYSTEM



YAESU FRG-9600
VHF/UHF SCANNING
RECEIVER



YAESU FT-212RH
45 WATT 2M TRANSCEIVER

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Equipment contact—**

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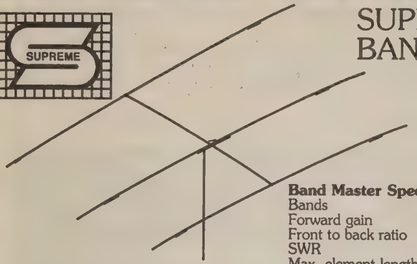
DISTRIBUTORS OF YAESU EQUIPMENT

SUPREME ANTENNAS

SUPREME

SUPREME BANDMASTER

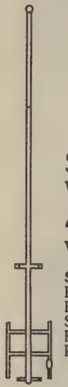


Band Master Specification

Bands	20, 15, 10 metres
Forward gain	up to 8dB
Front to back ratio	20dB or better
SWR	1.5 to 1 or less
Max. element length	7.970m (25' 10")
Boom length	3.660m (12' 0")
Turning radius	4.500m (14' 9")
Wind load	378N (86 lbs)
Wind surface	0.372m (4')
Assembled weight	8.5kg (18.73 lbs)
Power rating	300W
Feedline	52Ω RG.8/u
Feedline length	13.700m (45') or more
Mast diameter	45mm ($1^3/_4$") OD

Power Master Specification

Power rating	Full length limit



SUPREME VERTICALMASTER 4 BAND DX VERTICAL ANTENNA

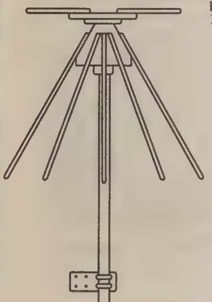
Specifications

Bands	160, 80, 40 and 20 metres
Height	12.2 metres
SWR	Less than 1.5:1 at resonance on all bands
Feedline	50Ω co-axial
Power Rating	Full legal limit

SIGNALMASTER 7 BAND VERTICAL

SIGNALMASTER is a totally new development in Vertical aerial design.
160 metres to 10 metres AUTOMATICALLY
Use the full antenna height of 7.8m on all 6 bands for better performance and efficiency.
This is the first time that a vertical aerial has been available in New Zealand with these outstanding features. SIGNALMASTER operates this way:

10 metres—as a full 1/4 wavelength giving better performance than other 1/4 wave systems.
15 metres—on an extended 1/4 wavelength with a decoupling stub.
20 metres—a full 1/4 wavelength giving a high base impedance matching into a 1/4 wave impedance transformer in the feedline.
80 and 40 metres—the resonator provides the inductive reactance for resonance plus top loading effect.
160 metres—the 160m base loading resonator provides a full base loaded vertical



SUPREME DISCONEMASTER

Broad Band VHF-UHF Antenna Specifications

Operating range	70MHz to above 450MHz
Polarisation	Vertical
Rating	1KW PEP
Impedance	50Ω
Termination	SO239

Distributors of SUPREME — ICOM — YAESU MUSEN
COMMUNICATIONS EQUIPMENT

Tricity House
TELEVISION AND RADIO
PO Box 1410, CHRISTCHURCH
Telephone (03) 667-443

NEW ZEALAND'S COMMUNICATIONS CENTRE

PRICE SCHEDULE

Correct as at June 1 1990
Subject to change without notice.
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—SUPREME—

HF ANTENNA SYSTEMS	
SUPREME Power Master high power Tri-band Beam	584.20
SUPREME Band Master standard Tri-Band Beam	506.10
SUPREME Vertical Master 4 band DX Vertical	450.20
SUPREME Signal Master 7 band Vertical Antenna	383.60
SUPREME Discone Master VHF/UHF broadband Antenna	186.20
SUPREME Wire Master Traps—Amateur bands	(pair) 81.40
SUPREME Wire Master Traps—Special requirements	(pair) 121.90
SUPREME Mobile Master multiband Mobile HF Whip	216.75
SUPREME Mobile Whips 6ft 80/40/20/15/10	51.20
SUPREME Heavy Duty CP flanged base	August
SUPREME Mobile Whips 6ft—Special requirements	POA
VHF/UHF ANTENNA SYSTEMS	
RF 3-element 6m Beam	263.85
RF 5-element 2m Beam	62.90
RF 10-element 2m Beam	125.75
RF 10-element H/V 2m Crossed Beam	163.90
RF 16-element 432MHz Log Periodic	98.15
RF balun 6m	34.30
RF balun 2m	22.24
SUPREME 1/4 λ Magnetmaster 2m	61.40
SUPREME 5/8 λ Gutter Grip 2m	54.18
SUPREME 5/8 λ Cowl Mount 2m	60.85
SUPREME 1/2 λ Cowl Mount 2m	59.35
SUPREME Bracket Mounts for Cowl Mount	8.25
SUPREME Co-Linear 2m	49.00
SUPREME Slim Jim 2m	32.70
MARINE ANTENNAS	
SUPREME HF 6ft Whips—made to specifications	POA
SUPREME VHF 1/2 λ Whip	59.35
CITIZEN BAND ANTENNAS	
Ground Plane—4 Radial	105.50
SUPREME Cowl Mount w/base pre-tuned	62.65
SUPREME Cowl Mount w/base tunable	54.55
SUPREME Gutter Grip	60.25
SUPREME 6ft Whip	51.20
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SUPREME VHF Base with Bung and Washer	13.20
SUPREME VHF Tilt Down Adaptor	25.85
SUPREME Collets	7.20
SUPREME Bungs for VHF Base	5.55
SUPREME Tuning Tips 2m and CB	5.45
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SUPREME 1kW Baluns 1:1 or 4:1	93.25

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3-Element 10m Beams

$257.40

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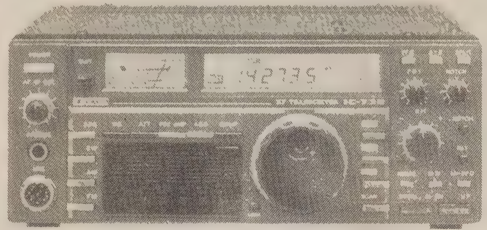
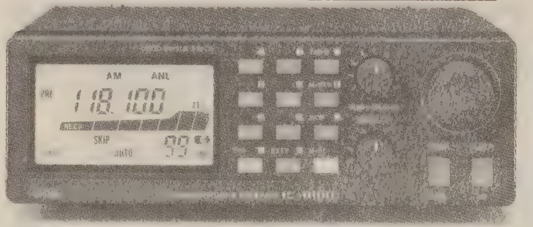


IC-735 HF ALL BAND TRANSCEIVER

- General Coverage Receiver
- Compact and Lightweight
- 12 Memory Channels
- 100W Output
- Extra Large LCD Readout
- 105dB Dynamic Range
- Receiver Incremental Tuning (RIT)
- Programmed and Memory Scans
- Built-in Attenuator and Preamplifier
- Passband Tuning
- Adjustable Notch Filter
- Automatic Gain Control (AGC)
- Noise Blanker
- HM-12 Microphone Included
- CW Semi/full Break-In
- CW Narrow Filter (Optional)
- Electronic Keyer (Optional)

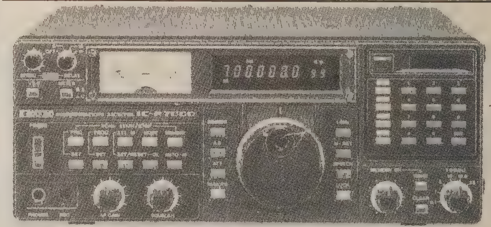
IC-751A HF ALL BAND TRANSCEIVER

- General Coverage Receiver
- 32 Memory Channels
- 105dB Dynamic Range
- 100W Output
- 100% Duty Cycle Rated
- Built-in Electronic Keyer
- CW Semi/full Break-In
- 500Hz CW Filter Included
- Adjustable Noise Blanker
- Passband Tuning
- Adjustable Notch Filter
- HM-36 Microphone Included
- Programmed, Memory and Mode Scans
- Built-in Attenuator and Preamplifier



IC-R100 Mobile/Base Receiver

For the enthusiast who prefers a more permanent installation the IC-R100 is ideal giving full frequency coverage of 500kHz–1800MHz and AM/FM. FM wide modes of operation. The IC-R100 boasts 100 memory channels to store your favourite stations and features similiar to the little pocket receiver.



IC-R7000 COMMUNICATIONS RECEIVER

- USB, LSB, FM, FM-Narrow, AM
- Wide Frequency Coverage
- 99 Memory Channels
- Infra-Red Remote Control (Optional)
- Variable Scan Speed and Delay
- Noise Blanker
- DC Kit for Portable Operation (Optional)
- Voice Synthesizer (Optional)
- Six Scanning Functions

IC-R1 Handportable Receiver

The new IC-R1 is a pocket-size receiver with continuous 150kHz through 1300MHz, AM/FM and FM wide reception. With 100 memory channels this tiny receiver is packed full of features: multi-scan functions, 11 search step increments, clock timer, power-save, S-meter and a convenient frequency selection via the keypad or tuning knob.

DUO-BAND VHF-UHF HAND HELD IC-24AT TRANSCEIVER

COMPACT AND LIGHTWEIGHT

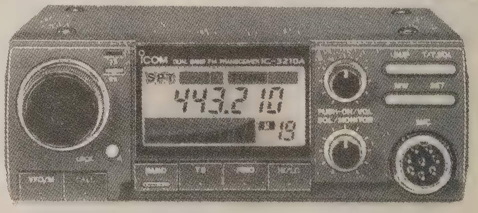
Even with so many functions the streamlined IC-24AT/ET weighs only 340g and measures just 52(W)× 136.5(H)×34.5(D)mm with the BP-82 BATTERY PACK.

CROSSBAND FULL DUPLEX CAPABILITY

The IC-24AT/ET is capable of simultaneously transmitting on the 144MHz band and receiving on the 430 (440)MHz band and vice versa. Use this capability to make convenient telephone-style full duplex QSOs.

FULL 5W OUTPUT POWER

By connecting a 13.8V external DC power supply, the IC24AT/ET delivers a full 5W of output power on both bands. You'll reach distant repeaters.



IC-3210 DUAL BAND FM TRANSCEIVER

- Full Duplex Crossband Operation
- 20 Double-spaced Memory Channels
- Built-in Duplexer
- Two Call Channels
- Four Priority Watch Functions
- Programmed, Memory and Selected Band Memory Scan
- 1750Hz Tone Call (Europe)
- Variable LCD Backlight Intensity
- Tone Squelch and Pocket Beep Functions (Optional)

For Full Details of any ICOM Communications Equipment contact—

Tricity House

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Telephone (03) 667-443

NEW ZEALAND'S COMMUNICATIONS CENTRE

DISTRIBUTORS OF ICOM EQUIPMENT

Terms, Conditions and Restrictions Applying to Amateur Radio Apparatus Licence

1. The licence permits the use of radio apparatus to conduct Radiocommunication for the purpose of self training, intercommunication and technical investigation other than for pecuniary gain.
2. Nothing in the licence, the International Radio Regulations 1982, Radiocommunications Act 1989, or the Radio Regulations 1987 prohibits any person in distress from using any means at that person's disposal to attract attention, indicate the person's position, and obtain assistance.
3. The apparatus, to which the licence relates, shall operate only on the frequency(ies), and power(s) shown on the schedule for the purpose specified on or annexed to the licence.
4. All reasonable care has been used in making radio frequency assignments. The nature of frequency assignments is such that no guarantee can be made that implementation and use will be trouble free. Accordingly the Crown does not accept liability under any circumstances for any loss or damage of any kind. In the event that frequency change is required, all costs are the sole responsibility of the licensee.
5. The licence is valid for the period specified on the front of the licence. The licence may be revalidated upon payment of the prescribed fee as set out in the THIRD SCHEDULE of the Radio Regulations 1987.
6. The emission from amateur radio apparatus for any radiocommunication should be of the minimum bandwidth and power as is necessary to ensure a satisfactory service.
7. Power Limits for Amateur Radio Apparatus:

   For Amateur Radio Apparatus the power limit shall be:

   i. Novice Grade;

      The radio frequency power output shall not exceed 10 watts mean power, or 30 watts peak envelope power.

   ii. Limited or General Grade:

      The radio frequency power output shall not exceed 120 watts mean power, or 400watts peak envelope power.

Notes to Amateur Frequency Allocation Chart

1. These bands are available for use by all Amateur licensees at times of natural disaster in connection with international relief operations, subject to the approval of the Secretary.
2. The bands 7.0–7.1MHz; 14.0–14.25MHz; 21.00– 21.45MHz, 24.890–24.990MHz; 28.0–29.7MHz; 144– 146MHz; 435–438MHz; 1260–1270MHz (earth-to-space direction only); 2.4–2.45GHz; 3.40–3.41GHz; 5.65– 5.67GHz (earth-to-space direction only); 5.83–5.85GHz (space-to-earth direction only); 10.45–10.5GHz; 24.0–24.05GHz; 47.0–47.2GHz; 75.5–81GHz; 142–149GHz; and 241–250GHz may also be used for amateur satellite communications.
3. These bands are or may be allocated for use by other services. Amateur licensees may not use them in a manner which interferes with such other services.
4. The frequencies 27.12MHz, 2.45GHz, 5.8GHz, and 24.125GHz are designated for industrial, scientific and medical (ISM) purposes with emissions confined within ±163kHz, ±50MHz, ±75MHz, and ±125MHz respectively of these frequencies. Amateur licensees operating telecontrol within these limits must accept interference from ISM equipment.
5. The band 275–400GHz is allocated for use by amateur licensees on a temporary basis for experimentation and development purposes.
6. Until further notice the following spot frequencies may not be used: 1800kHz (±3kHz); 1860kHz (±3kHz); 10.130MHz (±3kHz) 1850kHz–1950kHz may not be used in a manner which interferes with navigation uses of those frequencies.
7. Telecontrol and telemetry operation only. Power output is not to exceed 5W mean power.
8. The band 50–50.15MHz is allocated for temporary use. Operation is only permitted outside television programme hours.
9. Operation on these bands by General Grade licensees is not permitted within 12 months of obtaining the qualification. This does not apply to the sub band 21.10MHz to 21.20MHz.
10. These bands are allocated for use by other primary services and Amateur usage is on a secondary service basis. Users of a secondary service cannot claim protection from harmful interference from users of a primary or permitted service to which frequencies are already assigned or may be assigned at a later date.

8. No licensee of amateur radio apparatus shall use, or permit to be used, any such apparatus for the transmission of international communications on behalf of persons not being authorized amateur radio operators unless such communications are specifically authorized by the countries concerned.
   (a) The passing of brief messages of a personal nature on behalf of non-licensed people or organizations within New Zealand is permitted, provided no tolls, fees or other consideration shall be received or collected by the licensee of the amateur apparatus.

   (b) The licensee of amateur radio apparatus may permit persons other than qualified amateur operators to use the apparatus to pass brief personal messages under the direct supervision of the licensee. Under no circumstances may persons other than the authorized amateur operators engage in calling or signing-off procedures, or manipulate the controls of apparatus.
9. The licensee is only permitted to use the frequency bands listed below for the grade specified on the front page of the licence.

10. Amateur Frequency Allocation Chart.

Frequency Band	Notes	Use Restricted to Certificate holders of
1800–1950kHz	3 and 6	General
3.50–3.90MHz 3.525–3.625MHz	1 and 3 1 and 3	General Novice
7.00–7.10MHz 7.10–7.30MHz	1, 2 and 9 3, 9 and 10	General General
10.10–10.15MHz	1, 3, 6, 9 and 10	General
14.00–14.35MHz	1, 2 and 9	General
18.068–18.168MHz	1 and 9	General
21.00–21.45MHz 21.10–21.20MHz	1, 2 and 9 1 and 2	General Novice, General
24.89–24.990MHz	1, 2 and 9	General
27.12MHz	4 and 7	All Grades
28.00–29.70MHz 28.10–28.60MHz	2 2	General Novice
50.00–50.15MHz 51.00–53.00MHz	3 and 8 3	Limited & General Limited & General
144.0–146.0MHz 146.0–148.0MHz	1 and 2 3	Limited & General
430–449.75MHz	2, 3 and 10	Limited & General
610–622MHz	3 and 10	Limited & General
1.24–1.30GHz	2, 3 and 10	Limited & General
2.30–2.45GHz	2, 3, 4 and 10	Limited & General
3.30–3.50GHz	2, 3 and 10	Limited & General
5.65–5.85GHz	2, 3, 4 and 10	Limited & General
10.0–10.5GHz	2, 3 and 10	Limited & General
24.00–24.05GHz	2 and 4	Limited & General
24.05–24.25GHz	3, 4 and 10	Limited & General
47.0–47.2GHz	2	Limited & General
75.5–76.0GHz 76.0–81GHz	2 2 and 3	Limited & General Limited & General
119.98–120.02GHz	3 and 10	Limited & General
142–144GHz 144–149GHz	2 2, 3 and 10	Limited & General Limited & General
241–248GHz 248–250GHz	2, 3 and 10 2	Limited & General Limited & General
275–400GHz	3 and 5	Limited & General

New Zealand HF Bandplans

These plans help you comply with the official Frequency Allocation List: The class of emission from an amateur station shall be selected in the light of the total available bandwidth for all users and shall be in accordance with current operating practice.

These plans represent current operating practice.

Band (MHz)	Emission (See Notes)
1.8–1.95	6
3.5–3.55 3.55–3.9	N 6
7.0–7.03 7.03–7.3	N 6
10.1–10.15	N
14.0–14.1 14.1–14.35	N 6
18.068–18.11 18.11–18.168	N 6
21.0–21.1 21.1–21.45	N 6
24.89–24.93 24.93–24.99	N 6
27.12 ±0.163	T
28.0–28.1 28.1–29.5 29.5–29.7	N 6, B, S, 10

Data sub-bands

7MHz: Data sub-band	7.025– 7.040 MHz
10MHz: Data sub-band	10.140–10.150 MHz
14MHz: Data sub-band	14.070–14.112 MHz*
18MHz: Data sub-band	18.100–18.110MHz*
21MHz: Data sub-band	21.070–21.125MHz*
24MHz: Data sub-band	24.920–24.930 MHz*
28MHz: Data sub-band	28.050–28.150 MHz*

* Denotes no change from Auckland 1985 band plan.

Notes

N = Narrow-band modes; i.e., CW and RTTY. RTTY operating normally is at the high-frequency end of the segment. Call Book-listed selcal (RTTY selective calling) frequencies should be avoided by stations using other modes. SSB Phone may be used for morse practice texts by stations in 3.53-3.55 MHz segment.

6 = All modes except MCW and AFSK, to a MAXIMUM bandwidth of 6 kHz.

10 = All modes except MCW and AFSK to a MAXIMUM bandwidth of 10 kHz.

B = Beacons: Transmitting on Call Book-listed beacon frequencies should be avoided.

T = Telecontrol and telemetry only.

Refer to Index for designated frequencies and detailed bandplans.

All amateurs are reminded of:

1. The ITU Radio Regulations (Edition of 1982), including:
   307. The bandwidths of emissions shall also be such to ensure the most efficient utilisation of the spectrum; in general this requires that bandwidths be kept at the lowest value which the state of the technique and the nature of the service permits.
   1804. All stations shall radiate only as much power as is necessary to ensure a satisfactory service.
2. The New Zealand Radio Regulations 1987.
3. NZART Current Policy, Section 12A, Bandplans (Break-In, page 2, October 1983):
   d. All radio amateurs are requested to observe the published New Zealand bandplans which are to assist others to follow their interests with a minimum impact on you, and to assist you to follow your interests with minimum impact on others.

Data Mode Usage on 14 MHz Band

Considering the dramatic increase in data mode usage on the 20m band, it is recommended that the sub-band for these classes of signals be 14.070 MHz to 14.112MHz (with +500 Hz at 14.100 MHz for CW beacons) and within that data sub-band the current practices of traditional data modes may continue up to 14.095 MHz with 14.095 MHz to 14.112 MHz being reserved for other data modes including Packet.

Where Can I Find It?

NZART Policies

Code of Practice for BCI/TVI cases: October 1981, pages 37–44.
Content of ATV transmission: May 1984, Page 19.
NZART Current Policy: August 1982 pages 25–29; plus update October 1983, page 2.
Pirate operators and improperly licensed stations: August 1983, page 3.
Policy on Amateur Bands: November 1983, page 2.
Policy on Citizens Band: April 1982, page 3.
Policy on Radio Interference: August 1982, page 29.
Repeater and Beacon Policy: August 1981, pages 31–38; plus update August 1982, page 31.
Rules for AREC: November 1981, pages 30 and 31.

NZPO and NZRFS Letters

Amateur radio traffic handling, content of messages, September 1989, page 3.
Amateurs responsible for own bandplanning: July 1983, page 2.
Callsigns held for two years: July 1980, page 225.
Club Stations—callsigns and operator grades: September 1979, page 358.
Conduct of Morse Practice Sessions: April 1982, page 2.
Examination morse test to contain both letters and figures: January/February 1987, page 3.
Experimental Licensees, use of Callsigns: January/February 1990, page 11.
Mainland Call Suffix transportable to ZL7, 8, 9: October 1983, page 2.
Malicious Interference: November 1981, page 2.
Operation on 50–50.15MHz, November 1989, page 17.
Shortened Callsigns for contest groups: August 1986, page 3.
Transmitting equipment—control of sales: July 1980, page 255.
Use of callsign suffixes /P/M and /MM: August 1984, page 4.
Use of Tape Recorders on-air: January 1951, page 76.
Use of "ZM" prefix: November 1983, page 2.
Use of 5-letter groups for Morse Training: April 1982, page 2.
"ZL" not to be omitted from callsigns: May 1958, page 3.
"ZL0" callsigns for visitors: December 1980, page 551.

Miscellaneous

Amateur Bands and their use at time of natural disaster— Resolution 640: August 1983, page 21.
AREC and NZART membership: August 1984, page 33.
Civil Defence and the Radio Amateur—CD Bandplan: December 1981, pages 18–21.
Freedom of Speech: September 1984, page 18.
LOCATOR System: August 1984, page 14.
No GST for overseas member subscriptions: March 1987, page 3.
NZART Badge background: November 1982, page 24.
Radio Amateurs—Assistance to Police: December 1982, page 34.
Spectrum piracy: November 1983, page 14.
Towers and Townplanning: December 1982, page 36; also March 1983, page 21.

NZART VHF/UHF Bandplans

144MHz Bandplan

144MHz—E-M-E
—SSB, Beacons
—Space, Data
—repeater in
145MHz—
—Repeater out
—
—Space
146MHz—
—Repeater in
—FM simplex
—Repeater out
147MHz—
—Repeater out
—FM simplex
—Repeater in
148MHz—

Notes:

1. Amateur satellite service 144.3 to 144.5 and 145.8 to 146 protected from other use.
2. E-M-E, CW 144.0 to 144.1
3. SSB calling, ZL 144.2, Oceania 144.1
4. Beacons 144.25 to 144.3 according to geographic plan.
5. FM repeaters 16F3, polarisation vertical, spacing 25kHz.
   145.325 to 145.775 split – 600kHz
   146.625 to 147.000 split – 600kHz
   147.025 to 147.375 split + 600kHz
   Repeaters are named by frequency. first digit is unit MHz. If the unit kHz is zero, delete it from name: e.g., a repeater that transmits on 147.100 is called 710, a repeater that transmits on 146.625 is called 6625. See fixed station directory for full list. Standard repeaters may be called data repeaters if there is no data regeneration involved and data is the primary use.
6. FM simplex 146.425 to 146.625 and 147.400 to 147.625
   FM simplex calling 146.475
   ATV liaison 147.400
   ATV auxiliary audio input 147.450 (non-exclusive)
7. Linear repeaters will be mixed within the "145" repeater group. Bandwidth is not to exceed 30kHz.
8. 144.60 to 144.70 is reserved for single frequency data channels including store and forward Digipeaters.
   144.600 Primary data national link gateway
   144.625 Secondary data national link gateway
   144.650 Primary data local fixed stations
   144.675 Secondary data local fixed stations
   144.700 Data primary calling
9. Frequencies 144.1 to 144.25 and 144.5 to 144.6 not designated, general use.

430MHz Bandplan

430MHz—Links
—
432MHz—SSB
—Beacons
434MHz—FM repeater inputs
—
436MHz—Space
—
438MHz—Links
—FM repeater outputs
440MHz—
442MHz—
444MHz
446MHz } ATV
448MHz
—
449.75MHz—Links

Notes:

1. Amateur satellite service 435 to 438 protected from other use.
2. FM repeaters 5MHz split, 16F3, at .025MHz steps. Polarisation vertical.
   Inputs (433.500 to 434.975)
   Outputs (438.500 to 439.975)
   Repeaters are named by frequency. First digit is unit MHz. If the unit kHz is zero delete it from name, e.g. a repeater that transmits on 438.500 is called 850, one that transmits on 438.550 is called 855, one that transmits on438.525 is 8525.
3. FM simplex frequencies
   433.30 to 433.475 in .025 MHz steps.
   Named 330 to 3475.
4. SSB calling frequency 432.2
5. E-M-E 431.975 to 432.025.
6. Beacons 433.0 to 433.28
7. Link frequency bands 430.0 to 431.0
   438.0 to 438.45
   449.0 to 449.75
8. ATV channel 1 video 443.25 sound 448.75

610MHz Bandplan

610MHz—SSB
—Beacons
612MHz—
—
614MHz—
616MHz
618MHz } ATV
620MHz
—
622MHz—

Notes:

1. SSB calling frequency 610.2
2. FM calling frequency 610.3
3. Beacons 610.4 to 610.5
4. ATV Channel 2 Vision 615.25 sound 620.75 (E39).

1240MHz Bandplan

1240MHz—
—
1250MHz } ATV-2 AM channels or 1 FM channel
—
1260MHz—Links
—
—Space (up links only)
—
1270MHz—SSB
—FM repeater out
—
1280MHz } ATV-2 AM channels or 1 FM channel
1290MHz—
—FM repeater in
—SSB
—Beacons
1300MHz—Links

Notes:

1. Amateur satellite service, 1260 to 1270 protected from other use.
2. ATV allocation allows two repeater pairs using AM modulation or one repeater using FM modulation.

AM assignments

Channel		Vision	Sound
3	1243 to 1250	1244.25	1249.75
4	1250 to 1257	1251.25	1256.75
5	1276 to 1283	1277.25	1282.75
6	1283 to 1290	1284.25	1289.75

FM assignments

Channel		Centre Frequency	Audio Subcarrier
34	1243 to 1257	1250.0	5.5MHz
56	1276 to 1290	1283.0	5.5MHz

3. FM repeaters + 20 MHz split, 16F3, polarisation vertical. 1271.10, 1271.20 .... up to 1272.00. Named 110, 120, etc.
4. Beacons 1297.0 to 1297.3.
5. Repeater links 1259 to 1260 and 1299 to 1300.
6. Narrow band modes 1270 to 1271 and 1295 to 1299.
7. Specific designated frequencies:
   SSB calling 1270.2 or 1296.2
   FM calling 1270.3 or 1296.3
   E-M-E band 1295.9 to 1296.1

2300MHz Bandplan

2300MHz—Links
—E-M-E
2310MHz—
—
2320MHz—E-M-E
—FM repeater outputs
2330MHz—
—
2340MHz—ATV
—
2350MHz—
—
2360MHz—FM repeater inputs
—
2370MHz—
—
2380MHz—ATV
—
2390MHz—E-M-E
—Links
2400MHz—
—
2410MHz—
—
2420MHz—
—Space (down links only)
2430MHz—
—
2440MHz—
—
2450MHz—
—

Notes:

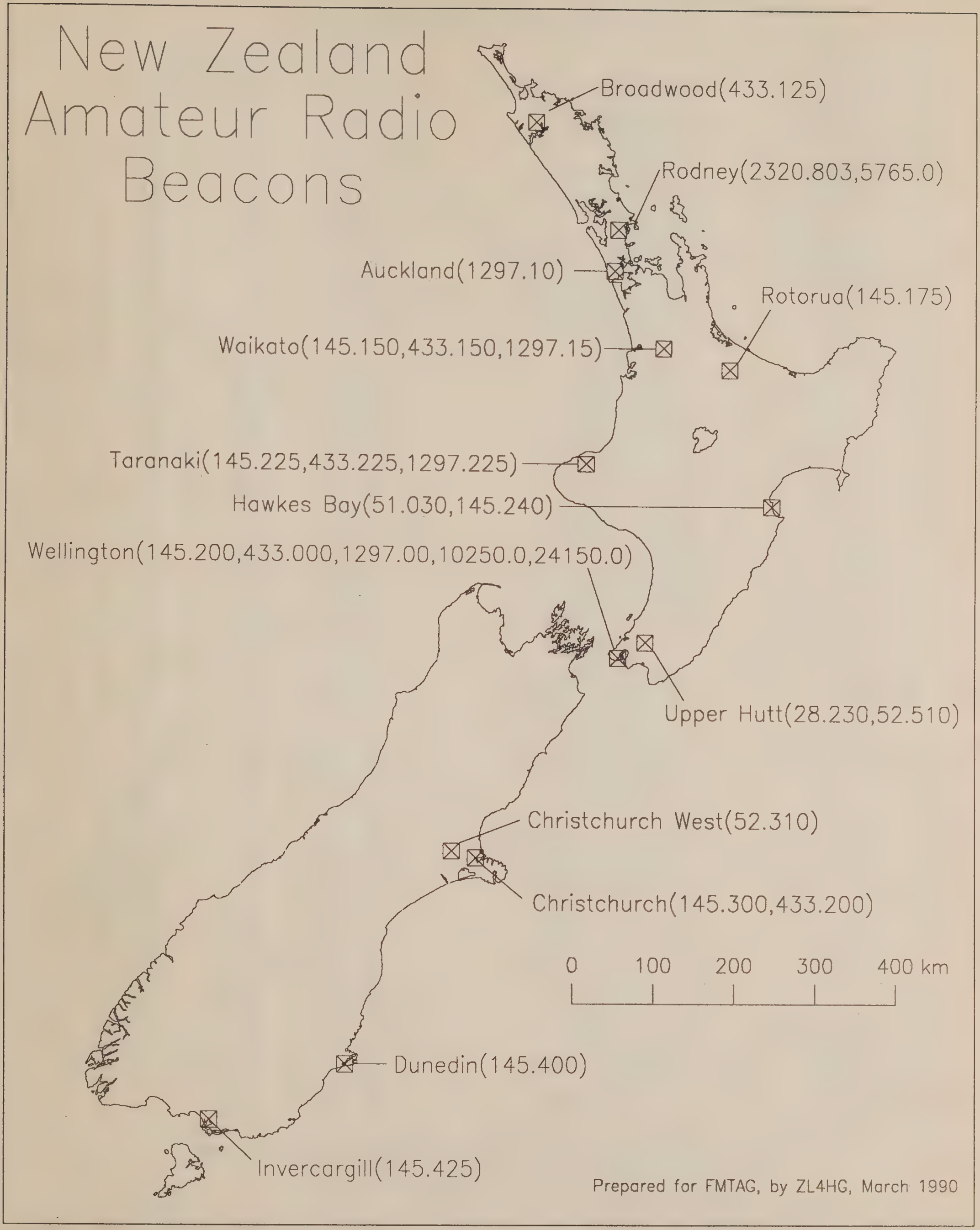
1. E-M-E 2304 to 2304.025
   2320 to 2320.025
   2390 to 2392
2. SSB calling 2304.2
3. Narrow band modes 2304.1 to 2325 general use
4. FM simplex 2329 to 2330 calling 2329.6
5. FM repeaters +33MHz split, 16F3, polarisation vertical. 2325.10, 2325.20 ... to 2328.90. Named 510, 520, etc.
6. Wideband links 2300 to 2303.8
   2395 to 2398.8
7. FM-TV (or AM TV by local arrangement)

	Centre frequency	Audio subcarrier
2330 to 2358	2344.0	7.5 MHz
2362 to 2390	2376.0	7.5 MHz

8. Beacons 2320.8 to 2321.0
9. Amateur satellite service 2400 to 2450.

New Zealand Amateur Radio Beacons

Name	Site	Call	Freq. MHz	Mode	Height mASL	EIRP watts	Branch
Upper Hutt 10m	Mount Climie	ZL2MHF	28.230	F1	867	1.0	63
Hawkes Bay 6m	Napier	ZL2MHB	51.030	F2	3	10.0	25
Upper Hutt 6m	Mount CLimie	ZL2MHF	52.510	F1	867	4.0	63
Christchurch West 6m	Aylesbury	ZL3MHF	52.310	F1	11	50.0	56
Waikato 2m	Hamilton	ZL1VHW	145.150	F1	97	10.0	81
Rotorua 2m	Kakanui	ZL1VHR	145.175	A1	504	6.0	33
Hawkes Bay 2m	Napier	ZL2MHB	145.240	F2	3	1.0	25
Taranaki 2m	Inglewood	ZL2VHT	145.225	F1	239	20.0	27
Wellington 2m	Hawkins Hill	ZL2UHF	145.200	F1	533	20.0	74
Christchurch 2m	Christchurch	ZL3VHF	145.300	F1	30	30.0	05
Dunedin 2m	Rotary Park	ZL4VHF	145.400	F1	160	20.0	30
Invercargill 2m	Southland Hospital	ZL4VHI	145.425	A1	25	5.0	37
Broadwood 70cm	Ngatieke #2	ZL1UHB	433.125	F2	240	2.0	78
Waikato 70cm	Hamilton	ZL1VHW	433.150	F1	97	20.0	81
Taranaki 70cm	Inglewood	ZL2VHT	433.225	F1	239	10.0	27
Wellington 70cm	Hawkins Hill	ZL2UHF	433.000	F1	533	12.0	74
Christchurch 70cm	Marley Hill	ZL3UHF	433.200	F1	488	2.0	05
Auckland 23cm	Nihotupu	ZL1UHF	1297.100	F1	330	10.0	66
Waikato 23cm	Hamilton	ZL1VHW	1297.150	F1	97	10.0	81
Taranaki 23cm	Inglewood	ZL2VHT	1297.225	F1	239	5.0	27
Wellington 23cm	Hawkins Hill	ZL2UHF	1297.000	F1	533	5.0	74
Rodney 13cm	—	ZL1SHF	2320.803	F2	305	5.0	71
Rodney 6cm	—	ZL1SHF	5765.000	F2	305	0.5	71
Wellington 3cm	Hawkins Hill	ZL2UHF	10.250GHz	F2	533	0.3	74
Wellington 24GHz	Hawkins Hill	ZL2UHF	24.100GHz	F2	533	0.05	74


New Zealand
Amateur Radio
Beacons
Broadwood(433.125)
Rodney(2320.803,5765.0)
Auckland(1297.10)
Rotorua(145.175)
Waikato(145.150,433.150,1297.15)
Taranaki(145.225,433.225,1297.225)
Hawkes Bay(51.030,145.240)
Wellington(145.200,433.000,1297.00,10250.0,24150.0)
Upper Hutt(28.230,52.510)
Christchurch West(52.310)
Christchurch(145.300,433.200)
0
100
200
300
400 km
Dunedin(145.400)
Invercargill(145.425)
Prepared for FMTAG, by ZL4HG, March 1990

New Zealand Amateur Radio Fixed Station Directory

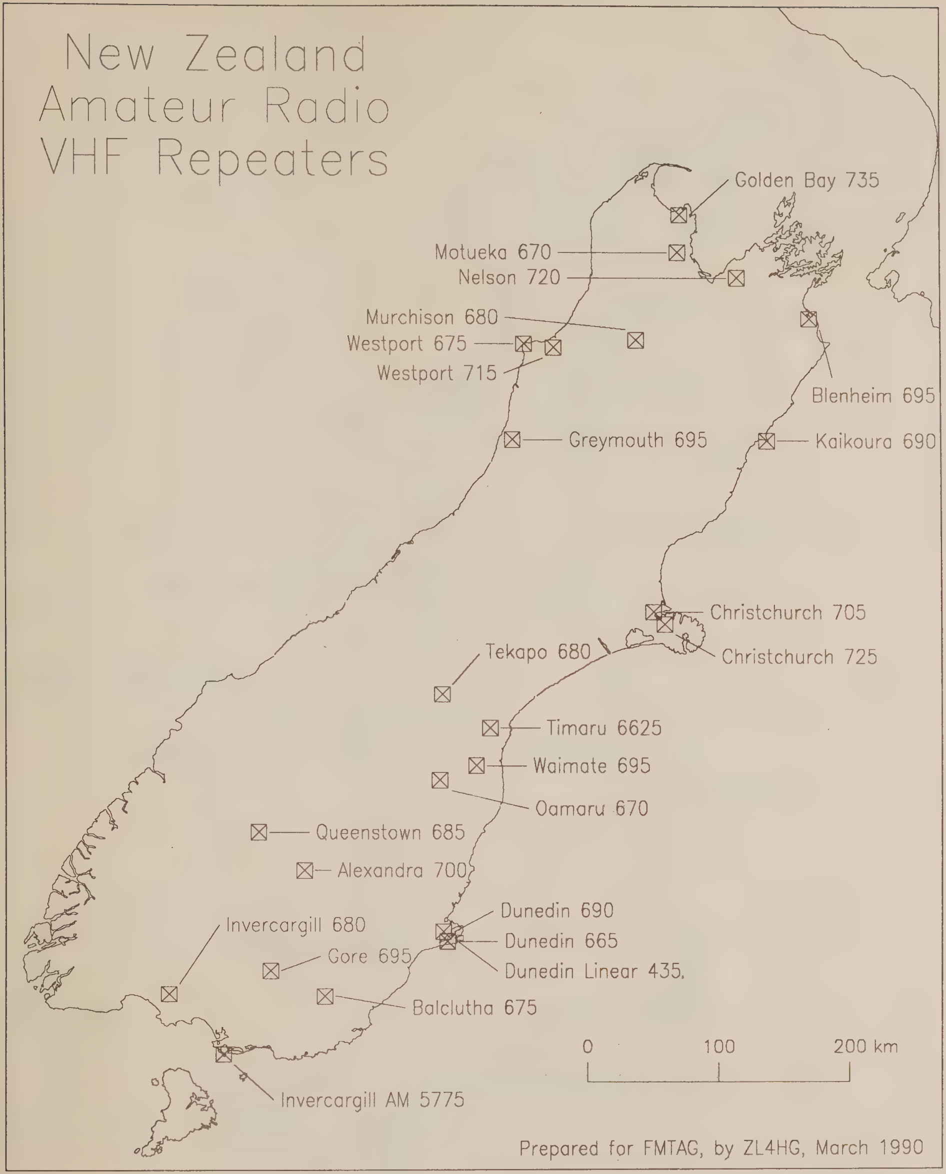
TWO METRE BAND—FM REPEATERS

Name	Site	Output Freq.	Height mASL	Branch
Far North 710	Mount Mangataureia	147.100	513	78
Kaikohe 715	Browns Hill	147.150	388	78
Whangarei 720	Parakiore	147.200	392	28
Dargaville 7175	Pukewharariki	147.175	320	73
Rodney 730	Dome	147.300	341	71
Auckland 690	Ruaotewhenua	146.900	391	66
Bombay 670	Mount Puketutu	146.700	376	66
Auckland 6625	Port Waikato	146.625	403	66
Tairua 6975	Tairua	146.975	349	81
Waikato 695	Mount Te Aroha	146.950	944	81
Tauranga 680	Mount Minden Te Puna	146.800	286	39
Edgecumbe 700	Mount Edgecumbe	147.000	777	81
Waitomo 7375	Rangitoto Range	147.375	869	55
Tokoroa 7025	Whakamar	147.025	743	57
Rotorua 735	Mt Ngongotaha	147.350	869	33
Taupo 675	Maroanui	146.750	897	60
Taumarunui 715	Hikurangi	147.150	770	38
Kakaramea 7275	Kakaramea	147.275	1313	38
Poverty Bay 680	Kaiti Hill	146.800	122	11
Gisborne 690	Whakapunake	146.900	950	11
Napier 725	Taraponui	147.250	1308	25
Hawkes Bay 670	Kahuranaki	146.700	652	13
New Plymouth 720	Power Station Chimney	147.200	190	27
Opunake 540	Opunake	145.400	1559	54
Wanganui 690	Maewa	146.900	658	48
Taihape 6775	Mount Mataroa	146.775	799	23
Southern Hawkes Bay 665	Mount Wharite	146.650	915	06
Manawatu 7125	Pahiatua Track	147.125	488	20
Masterton 680	Mount Rangitumau	146.800	604	46
Rewa 735	Mount Rewa	147.350	604	46
Holdsworth 7175	Mount Holdsworth	147.175	1470	46
Barton 7325	Mount Barton	147.325	1300	46
Southern Wairarapa 715	Warrens Airstrip	147.150	500	82
Kapiti 685	Mount Field	146.850	615	69
Climie 730	Mount Climie	147.300	867	63
Titahi Bay 675	Onepoto Reservoir	146.750	90	42
Belmont 710	Mount Belmont	147.100	450	74
Lower Hutt 700	Mount Fitzherbert	147.000	377	18
Golden Bay 735	Richmond Hill	147.350	620	24
Motueka 670	Mount Campbell	146.700	1328	24
Nelson 720	Saddle Hill	147.200	1215	26
Blenheim 695	Jamies Knob	146.950	277	22
Murchison 680	Mount Murchison	146.800	1469	26
Westport 675	Cape Foulwind Lighthouse	146.750	91	62
Westport 715	Mount Rochfort	147.150	1041	62
Kaikoura 690	Kaikoura Peninsula	146.900	91	76
Greymouth 695	Sewell Peak	146.950	834	49
Christchurch 705	Marley Hill	147.050	488	05
Christchurch 725	Herbert Peak	147.250	926	05
Tekapo 680	Mount Rollesby	146.800	1341	34
Timaru 6625	Mount Horrible	146.625	332	34
Waimate 695	Mount Studholme	146.950	1088	34
Oamaru 670	Station Peak	146.700	886	64
Alexandra 700	Fruitlands	147.000	1478	61
Queenstown 685	Double Cone	146.850	2286	75
Dunedin 665	Highcliffe	146.650	310	30
Dunedin 690	Mount Cargill	146.900	674	30
Balclutha 675	Kuriwao	146.750	638	35
Gore 695	McLeod's Hill	146.950	640	37
Invercargill 680	Bald Hill, Otautau	146.800	798	37

Split −600kHz (user transmits low), 145.325 to 145.775, 146.625 to 147.000
+600kHz (user transmits high), 147.025 to 147.975
No tone required, no time out used. Polarisation all vertical.

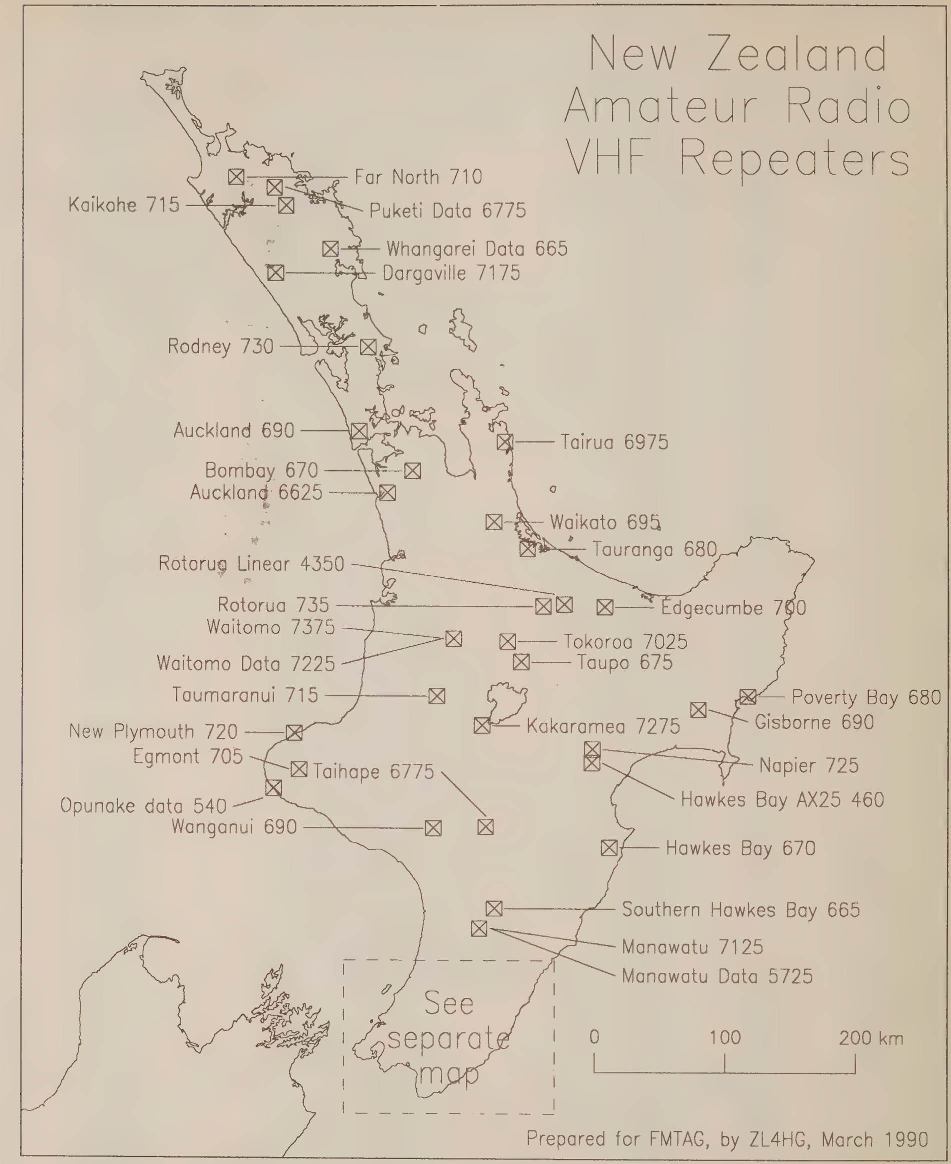
Mode voice. 16KOF3EJN means 5kHz transmitter RF deviation which implies with voice a 16 kHz wide IF filter in the receiver.

Short Term Special Purpose repeaters for portable/emergency use are not listed. Frequencies used for these are 6675, 6725, 6825, 6875, and 6925.



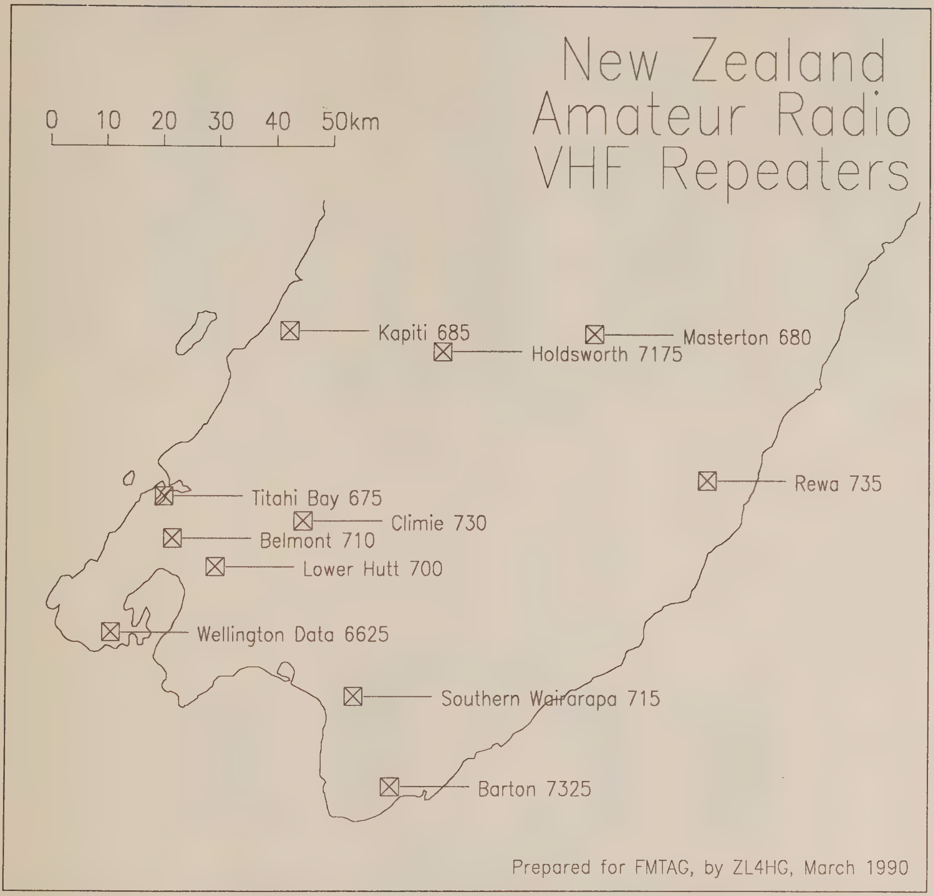
AM and Linear Repeaters

Name	Site	Input Freq	Output Freq	Height mASL	Branch
Rotorua Linear	Moerangi	144.950	144.350	685	33
Dunedin Linear	Highcliff	144.950	144.350	210	30
Invercargill AM	Bluff Hill	144.650	145.775	265	37



DATA REPEATERS—Standard Repeater primarily used for Digital Modes

Name	Site	Output Freq.	Height mASL	Branch
Pukoti Data	Manginangina	146.775	378	78
Whangarei Data	Parakiore	146.650	392	28
Waitomo Data	Rangitoto Range	147.225	869	55
Manawatu Data	Pahiatua Track	145.725	488	20
Wellington Data	Hawkins Hill	146.625	533	74



Prepared for FMTAG, by ZL4HG, March 1990

Two Metre Simplex Frequencies

Simplex Name	Frequency (MHz)	
6425	146.425	
6475	146.475	calling
6525	146.525	
6575	146.575	
6625	146.625	
7400	147.400	ATV liaison
7425	147.425	
7450	147.450	ATV repeater sound input
7475	147.475	
7525	147.525	
7575	147.575	
7625	147.625	

DIGIPEATERS—Single Frequency Store and Forward (AX25)

Name	Site	Freq.	Height mASL	Branch	Digipeater Call	Alias
Northland	—	144.65	—	28	ZL1AM-1	HUK
Ardmore	—	144.65	—	—	ZL1UNI-1	AKL
Klondyke	Port Waikato	144.65	403	—	ZL1BQ-3	*
Hamilton	—	144.65	—	—	ZL1UX-1	HAM
Rangitoto	Rangitoto Range	144.65	869	55	ZL1IZ-1	OTO
Tauranga	Papamoa	144.65	224	39	ZL1TP-1	BOP
Whakatane	—	144.65	—	—	ZL1AIU	N/A
Gisborne	Hikirangi	144.65	1444	11	ZL2GIS-1	ARO
Gisborne	—	144.65	—	—	ZL2TFM-1	GSB
New Plymouth	Harford	144.65	200	27	ZL2BDN-1	NPL
Waitara	—	144.65	—	—	ZL2UFW-1	NP2
Mount Egmont	—	144.65	—	—	ZL2?	MEG
Hawkes Bay	Kahuranake	144.65	792	25	ZL2BQK-3	HBY
Napier	—	144.65	—	—	ZL2AMD-10	NPE
Manawatu	Mt Wharite	144.65	915	20	ZL2IB-1	PMR
Kapiti	Mt Field	144.65	615	69	ZL2KB-1	KAP
Christchurch	Marley Hill	144.65	488	05	ZL3CHC	CHC
Timaru	Mt Studholme	144.65	1000	34	ZL3UR-1	MSD
Queenstown	Double Cone	144.65	2286	75	ZL4NQ-1	ZQN
Dunedin	Mt Cargill	144.65	674	30	ZL4AA-1	DUD

*ROSE system, not NetRom compatible.

Amendments:

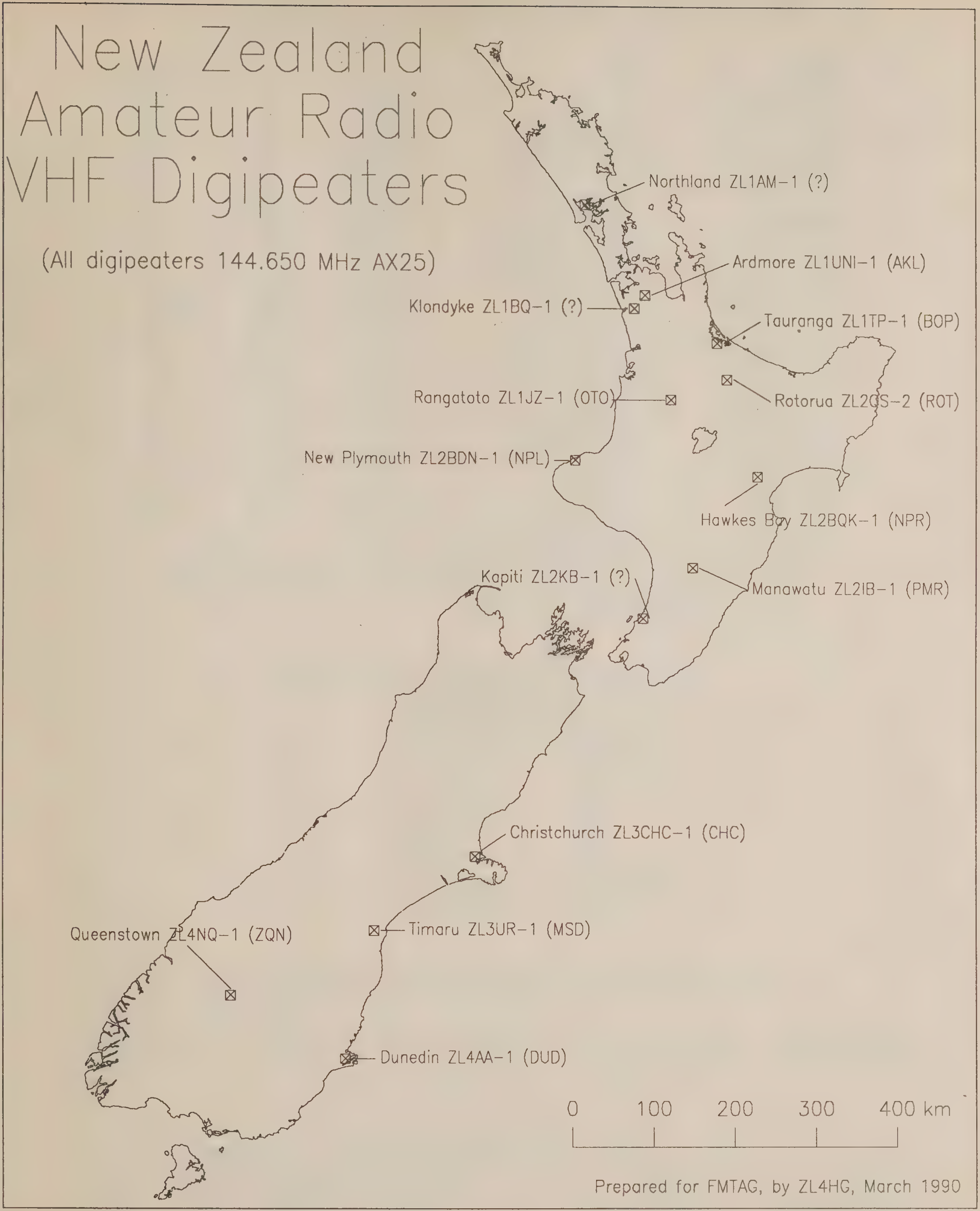
Bulletin Boards

ZL2TMQ	Whangarei	ZL2BFJ	Levin
*ZL1AB	Auckland	*ZL2WA	Wellington
*ZM1UX	Hamilton	ZL2AHK	Picton
ZL1TJK	Tokoroa	*ZL3AC	Christchurch
*ZL2BDN	Waitara	*ZL4AA	Dunedin
ZL2RB	New Plymouth	ZL4TAY-9	Invercargill
ZL2BQK	Napier		

*BBS operated by Branch.

Note: Bulletin Boards (especially individually operated) constantly vary in operation. This list will probably be incorrect at time of publication.

Amendments:



New Zealand Amateur Radio VHF Digipeaters

(All digipeaters 144.650 MHz AX25)

Prepared for FMTAG, by ZL4HG, March 1990

See the "Digital Modes" column of *Break-In*
for regular and additional information

New Zealand Amateur Radio Fixed Station Directory

SEVENTY CENTIMETRE BAND—FM REPEATERS

Name	Site	Output Freq.	Height mASL	Branch
Whangarei 870	Parahaki	438.700	240	28
Auckland 850	Mt. Eden	438.500	200	66
Auckland 900 (L)	Port Waikato	439.000	403	66
Hunua 895	Clements Hill	438.950	300	65
Waikato 860	Mount Te Aroha	438.600	944	81
Tauranga 885	Mount Minden	438.850	286	39
Tokorua 865	Whakamaru	438.650	793	57
Waitomo 870	Rangitoto Range	438.700	869	55
Rotorua 855	Mount Ngongotaha	438.550	757	33
Egmont 4025 (L)	East Mount Egmont	434.025	1509	74
Egmont 880	East Mount Egmont	438.800	1559	54
Waimarino 875	Turoa Skifield	438.750	2050	45
Hawkes Bay 900	Te Mata Peak	439.000	389	25/13
Hawkes Bay 870	Te Mata Peak	438.700	389	25/13
Taihape 865	Cleavers Hill	438.650	822	23
Manawatu 8525	Pahiatua Track	438.525	488	20
Kapiti 885	Mount Field	438.850	615	69
Climie 860	Mount Climie	438.600	867	63
Tawa 895	Tawa	438.950	70	74
Wellington 850	Mount Victoria	438.500	195	74
Wellington 900 (L)	Mount Belmont	439.000	450	74
Nelson 890	Fringed Hill	438.900	793	26
Blue Duck 3975 (L)	Blue Duck	433.975	1021	74
Christchurch 900 (L)	Marley Hill	439.000	488	74/05
Hornby 850	Cass Peak	438.500	522	56
Dunedin 850	Mount Cargill	438.500	674	30
Invercargill 870	Invercargill City	438.700	45	37

Split –5 MHz, except for Egmont and Bluc Duck link repeaters which are +5 MHz.
Short Term Special Purpose repeaters for portable/emergency use are not listed.
STSP frequencies used are 8675 and 8750.
(L) denotes National Link repeaters.

Seventy Centimetre Simplex Frequencies

Simplex Name	Frequency (MHz)
330	433.300
3325	433.325
335	433.350
3375	433.375
340	433.400
3425	433.425
345	433.450
3475	433.475

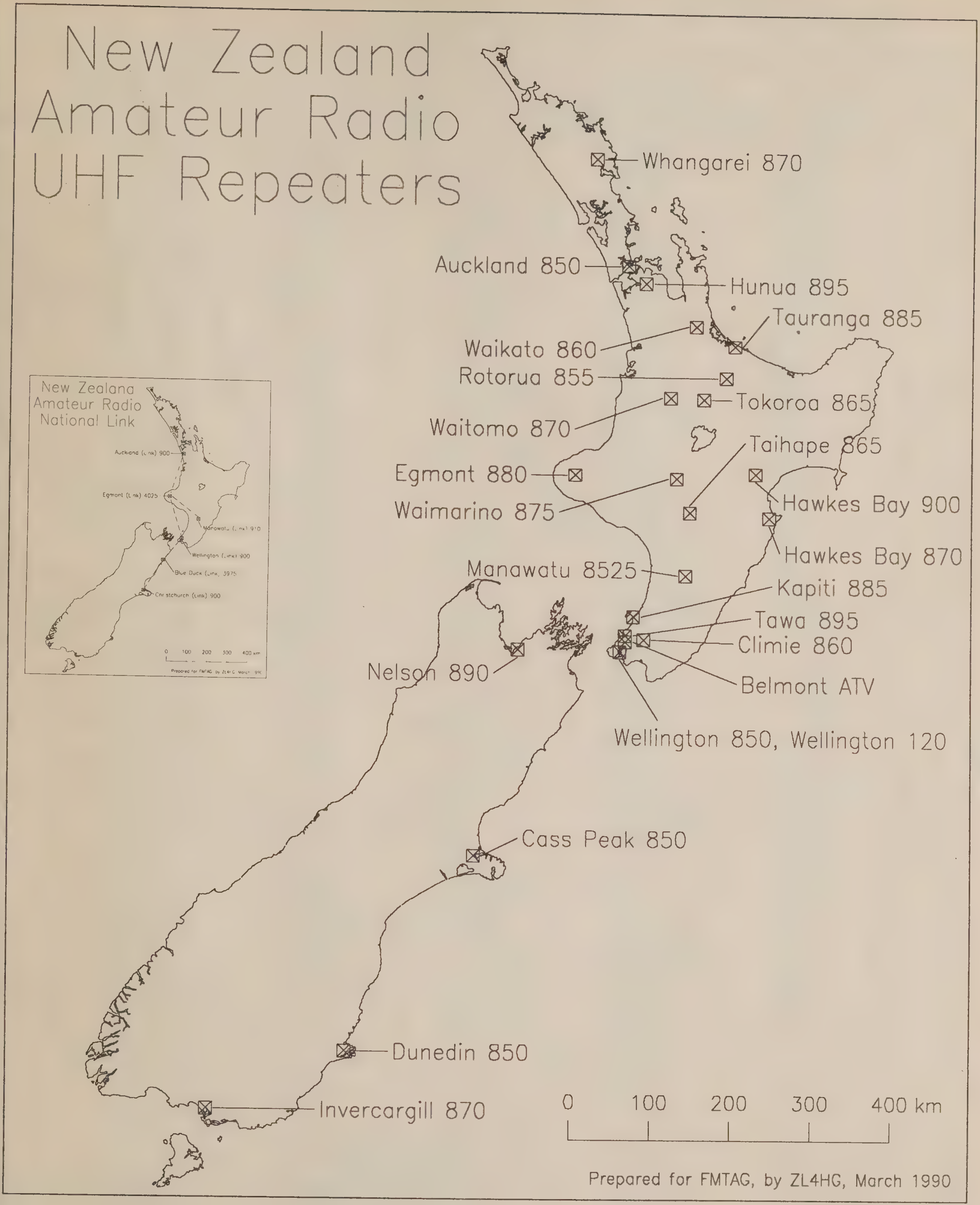
TWENTY-THREE CENTIMETRE BAND—FM REPEATERS

Name	Site	Input Freq.	Output Freq.	Height mASL	EIRP watts	Branch
Wellington 120	Mount Victoria	1291.200	1271.200	195	13	74

TELEVISION

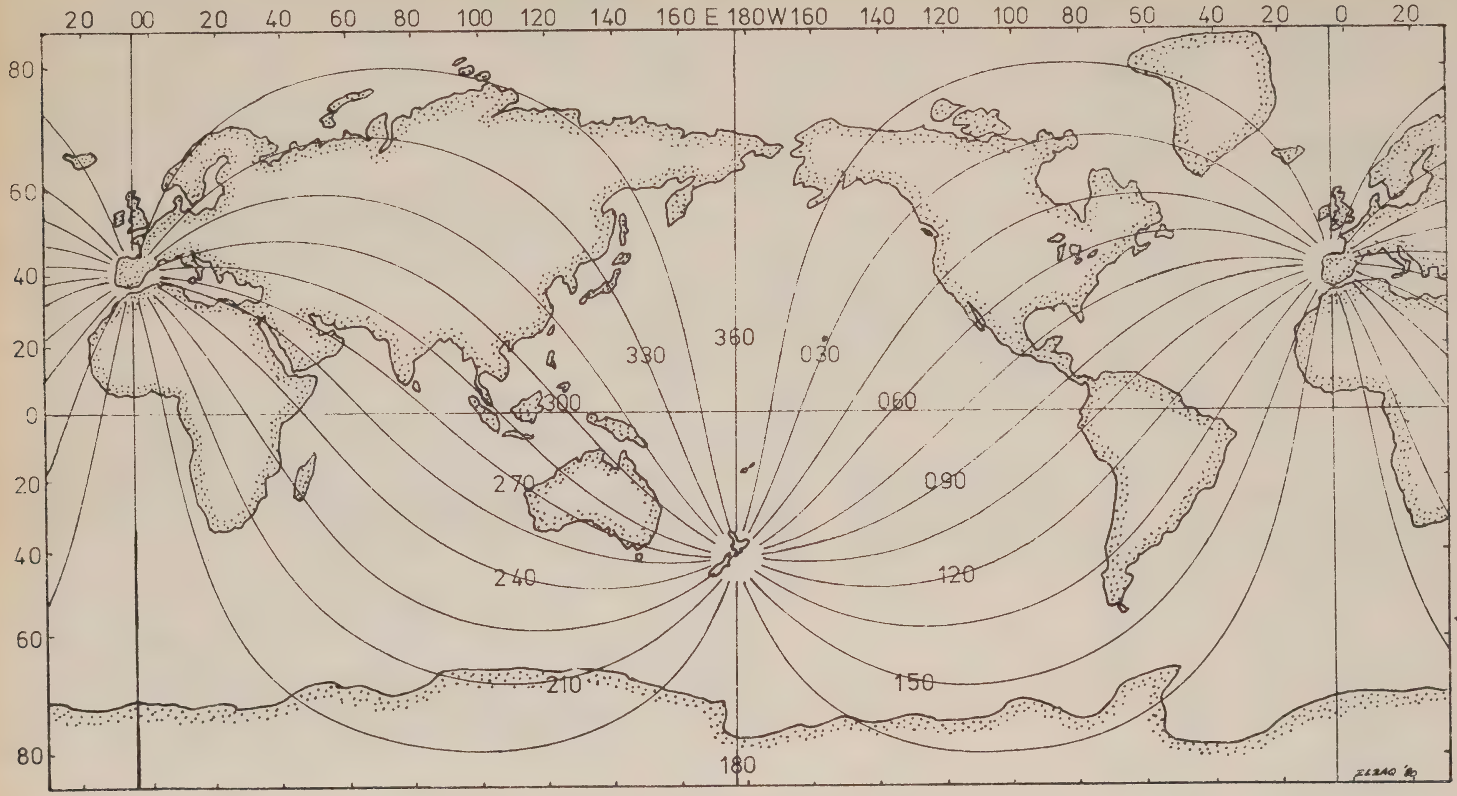
Name	Site	Input Freq.	Output Freq.	Height mASL	Branch
Auckland ATV	(Temporary)	443.25	615.250	—	66
Wellington ATV	Mt Belmont	443.25	615.250	450	74
Tasman Bay ATV	Saddle Hill	615.25	443.25	1215	24
Albany ATV	Albany	615.25	443.25	66	

ATV repeater input 443.25 MHz vision, 449.75 MHz sound, output 615.25 MHz vision, 620.75 sound.



New Zealand Amateur Radio UHF Repeaters

Prepared for FMTAG, by ZL4HG, March 1990



GREAT CIRCLE BEARINGS FROM WELLINGTON.

Great Circle DX Bearings Based on Wellington

prepared by RON MURPHY ZL1AMM

Listed below are the approximate short path bearings based on the great circle map centred on Wellington. These listings, based on rue north, will point your directional antenna in the appropriate direction before final adjustment depending on the sharpness to which he antenna was installed. The long path bearings are about 180 degrees in the opposite direction.

A good inexpensive Azimuth (great circle on Wellington) map, number NZMS 47, is obtainable from metropolitan offices of the Department of Survey and Land Information. Available from overseas are several computer-derived DX beam headings.

A2	210	FW	N	KP2	90	TT	220	XZ	290	4X	265
A3	20	FY	115	KP4	90	TU	160	Y2–9	320	4Z	265
A4	270	G	345	KP5	90	TY	190	YA	290	5A	260
A5	295	GC	345	KX	350	TZ	160	YB, YC, YD	300	5B	270
A6	275	GD	5	LA	335	UA1, 3, 4, 6	320	YI	270	5H	230
A7	275	GI	15	LU	135	UA2	320	YJ	330	5N	195
A9	275	GJ, GU	345	LY	320	UA9, 0	330	YK	270	5R	225
A, K, N, W	60	GM	N	LX	325	UB	300	YL	320	5T	160
AP	280	GW	350	LZ	285	UC	310	YN	90	5U	175
BV	315	H4	335	N, K, W, A	60	UD	290	YO	285	5V	175
BY	315	HA	300	OA	110	UF	290	YS	90	5W	20
C2	N	HB	300	OD	275	UG	290	YU	285	5X	235
C3	280	HB0	300	OE	305	UH	290	YV	100	5Z	235
C5	155	HC	100	OH, OJ	330	UI	290	YV0	100	6O	245
C6	95	HC8	90	OK	310	UJ	290	ZA	275	6W	150
C9	230	HH	90	ON	330	UL	290	ZB	180	6Y	90
CE	130	HI	90	OX	20	UM	290	ZC	270	7O	275
CE0	110, 120	HK	100	OY	N	UO	285	ZD7	180	7P	220
CO	80	HK0	90	OZ	330	UP, LY	320	ZD8	170	7Q	230
CN	220	HL	325	P2	310	UQ, YL	320	ZD9	170	7X	240
CP	125	HP	90	P4	95	UR, ES	320	Z2	220	7Z	260
CT	130	HR	90	PA	330	V2	95	ZF	90	8P	90
CT3	140	HS	285	PJ	95	V3	85	ZK1N	50	8Q	275
CU2, CT2	90	HV	280	PJ7	90	V4	95	ZK1S	60	8R	110
CX	140	HZ	260	PY	140	V5	200	ZK2	N	9G	185
CY9, 0	65	I	280	PY0	125, 145	V6, 7	320	ZK3	30	9H	250
2, 3	210	IS	270	PZ	100	V85	290	ZL7	110	9J	220
4	150	J2	245	RA	see UA	VE	50	ZL8	30	9K	270
6	230	J3	95	S0	140	VK	280	ZL9	190	9L	165
J	320	J5	155	S2	290	VK9L	290	ZP	125	9M2, 4	285
U	310	J6	95	S7	240	VK9N	340	ZS	210	9M6, 8	285
A	260	J7	95	S9	205	VK9X	275	ZS2M	210	9N	295
A6	250	J8	95	SM, SK, SL	330	VK9Y	270	ZS3, ZS9	200	9Q	230
A8	140	JA	335	SP	310	VK9Z	320	1A0	280	9U	230
A9	180	JD	335	ST, ST0	250	VK0H	220	1S	285	9V	285
I	10	JT	325	SU	260	VK0M	210	3A	295	9X	230
L	180	JW	5	SV	270	VP2	95	3B6	235	9Y	100
P	280	JX	5	T2	N	VP5	95	3B7	235		
S	320	JY	265	T30	N	VP8	150	3B8	235		
T	245	K, N, A, W	60	T31	20	VP9	80	3B9	230		
, FD, FE	310	KC6	320	T32	30	VQ9	265	3C	205		
C	230	KG4	90	T33	N	VR6	90	3C0	205		
G	100	KH1	15	T5	245	VS6	305	3D2	N		
H	230	KH2	320	T7	280	VU	270	3DA0	220		
K	340	KH3	20	TA	280	VU7A	285	3V	250		
M	95	KH4	N	TF	15	VU7L	275	3X	155		
O	60	KH5, KH5K	30	TG	90	W, K, N, A	60	3Y, Bouvet	185		
P	65	KH6	25	TI	90	XE	70	3Y, Peter I	155		
R	235	KH7	N	TI9	90	XF4	70	4J	330		
S	100	KH8	20	TJ	205	XT	180	4K2/FJL	N	Antarctica	180
T5W	220	KH9	350	TK	230	XU	295	4S	280	Abu Ail	255
T5X	225	KH0	320	TL	205	XV	295	4U/ITU	300	Banaba	N
T5Y	180	KL	15	TN	210	XW	295	4U/UN	65	Conway Reef	N
T5Z	230	KP1	90	TR	200	XX	305	4W	255	Jarvis Is.	30

28 MHz Beacon Project

This project is sponsored and encouraged by IARU and organised by Alan Taylor G3DME. The establishment of the beacons has stimulated scientific interest in the propagation paths revealed by the reception of the beacons. They also provide signals on what may otherwise be a dead band.

Reports on beacon reception should be sent to ZL3ND, 356 Avonside Drive, Christchurch 8006.

*Indicates that the beacon has been heard in ZL at least once so far in cycle 22.

Freq MHz	Callsign	QTH
28.175	VE3TEN*	Canada
28.195	IY4M*	Italy (robot)
28.200	GB3SX	Crowborough, England
28.2025	ZS5VHF*	Natal
28.205	DL0IGI*	Mt Predighstul, east of Munich
28.212	EA6RCM*	Box 1000, Palma, Majorca
28.215	GB3RAL*	Slough, England (20 W)
28.220	5B4CY*	Cyprus (26 W, GP antenna)
28.2225	HG2BHA	Hungary (10 W, GP antenna)
	PY2AMI*	Brazil
28.227	FX5TEN*	Toulouse
28.229	EA6AU	Balearic Island
28.230	ZL2MHF*	Mt. Climie, New Zealand (50 W, vert. dipole)
28.235	VP9BA*	Southampton, Bermuda
28.2375	LA5TEN*	Oslo, Norway
28.240	OA4CK*	Lima, Peru
28.240	5Z4ERR	Kiambu
28.246	EA3JA*	Barcelona
28.2475	ZS1CTB*	Capetown, South Africa
28.250	Z21ANB*	Zimbabwe
28.250	4N3ZHK*	Mt Kum.
28.2525	OH2TEN*	Finland
28.255	LU1UG*	Argentina
28.257	DK0TEN	Konstanz, Germany
28.259	VK5WI*	Adelaide, Australia
28.2615	VK2RSY*	Sydney, Australia
28.264	VK6RWA*	Perth, Australia
28.266	VK6RTW*	Albany, Australia
28.268	VK8VF	Darwin, Australia
28.270	VK4RTL*	Townsville, Australia
28.270	ZS6PW*	Pretoria, South Africa
28.272	9L1FTN	Sierra Leone
28.2775	DF0AAB*	Lutjenberg, Germany (40 W, GP antenna)
28.2825	VE2HOT*	
28.2835	OK0EG*	Czechoslovakia
28.284	VP8ADE*	Falkland Is. (V-beam to England)
28.290	VS6TEN*	Hong Kong (10 W vertical)
28.300	ZS1LA	South Africa

The above are listed as Official Stations of the International Beacon Project.

The following are listed and many of them have been heard but their operational status is unknown.

28.050	PY2GOB
28.191	VE6YF*
28.200	KF4MS*
28.202	KE5GY*
28.206	KJ4X*
28.2075	W8FKL*
28.208	WA1IOB
28.2085	NX2O*
28.210	KC4DPC*
28.217	WB9VMY*
28.218	W8UR*
28.222	W9UXO*
28.224	WD0HSP
28.225	KW7Y*
28.232	KD4EC*
28.233	W7JPI*
28.242	LU4FM*
28.252	W7JX*
28.255	WB4JHS*
28.256	WT8D*
28.260	KA1NSV*
28.263	KC6BSJ*
28.267	KB4UPI*
28.275	AL7GQ
28.2815	WB2BBW*
28.285	KA4WPH*
28.286	KA1YE*
	KK4M*
28.286	KE2DI*
28.287	W8OMV
28.288	W2NZH
28.292	LU2FFV
28.295	WB8UPN*
28.295	WC8E*
28.295	W3VD*
28.296	W6NLG
28.297	WA4DJS*
28.301	KF4MS*
28.303	PT7AAC*
28.306	PT8AA*
28.888	W6IRT*
28.890	W9GOE
28.992	DL0ANN

14 MHz Beacons

This series is sponsored by the Northern Californian DX Foundation. The beacons all operate in turn on the one frequency of 14.100 MHz. The series starts on the hour. They send the following series of signals at the powers indicated:

QST de (callsign)	100W
• —	100W
• • —	10W
• • • —	1W
• • • • —	0.1W
sk de (call)	100W

The call sequence is as follows:

T+0 min	4U1UN/B	New York
T+1	W6WX/B	Stanford
T+2	KH6O/B	Honolulu
T+3	JA2IGY	Ise City
T+4	4X6YU/B	Tel Aviv
T+5	OH2B	Espoo
T+6	CT3B	Funchal
T+7	ZS6DN/B	Pretoria
T+8	LU4SAA	Santa Cruz
T+9	HK4LR/B	Colombia

Australian Beacons

Call Sign	Frequency MHZ	Site
VK8VF	144.010	Darwin
VK6RBS	144.020	Busselton
VK4RTT	144.400	Mt Mowbullan
VK1RCC	144.410	Mt Majura
VK2RSY	144.420	Dural
VK3RTG	144.430	Glen Waverley
VK4RIK	144.445	Mt Haren
VK4RTL	144.445	Mt Stuart
VK6RTW	144.465	Albany
VK7RMC	144.470	Newnham
VK8RRSB	144.485	Alice Springs
VK3RGG	144.530	Mt Anakie
VK3RGI	144.535	Moe
VK6RTU	144.650	Kalgoorlie
VK2RCW	144.950	Turramurra
VK3RCW	144.950	Mt Waverley
VK6RPH	145.000	Cloverdale
VK3RML	146.700	Ferny Creek
VK6RAP	420.100	Roleystone
VK6RBS	432.060	Busselton
VK6RPR	432.140	Cloverdale
VK1RBC	432.410	Melba
VK2RSY	432.420	Dural
VK3RTG	432.430	Glen Waverley
VK4RSD	432.440	Mt Coot-Tha
VK4RIK	432.445	Mt Haren
VK4RTL	432.445	Mt Stuart
VK6RTW	432.465	Albany
VK3RGG	432.530	Mt Anakie
VK3RMB	432.535	Mt Buninyong
VK6RTU	432.565	Kalgoorlie
VK6RWC	434.925	Lesmurdie
VK6RBS	1296.180	Busselton
VK1RBC	1296.410	Melba
VK2RSY	1296.420	Dural
VK6RPR	1296.420	Nedlands
VK4RSD	1296.440	Mt Coot-Tha
VK4RIK	1296.445	Mt Haren

Write that article
for
Break-In

SIX METRE BEACONS

Frequency	Callsign	Location	LOC	ERPW	Mode	Source	Date
50.000	G3BUX	Buxton	IO93BF	40	AiA	RadCom	12/89
50.005	H44HIR	Honiara	QI00—	10	—	ZL3AAU	25/3/90
50.005	ZS2SIX	Port Elizabeth	KF25—	1-	A1A	AR	3/90
50.010	ZS1STB	Still Bay	KF05—	25	F1A	JA DXer	9/89
50.011	JA2IGY	Mie	PM84—	10	—	ZL3AAU	29/3/90
50.013	P29BPL	Port Moresby	QI30—	30	—	AR	6/90†
50.015	PJ2B	Bonaire Is.	FK52TF	15	—	JA Dxer	9/89
50.015	SZ2DH	Athens	KM18MM	10	—	AR	3/90
50.017	JA6YBR	Miyazaki University	PM51RT	50/.1	—	ARA	Vol. 12 No. 11
50.017	JA6ZIH	Miyazaki	PM51RU	10	A1A	AR	3/90†
50.020	GB3SIX	Anglesay	IO73TJ	100	F1A	RadCom	12/89
50.020	CX1CCC	Uruguay	—	5	—	AR	3/90
50.0225	FR5SIX	Union Is	LG58—	2	—	RadCom	1/90
50.025	OH1SIX	Finland	KP11QU	50	A1A	RadCom	11/89
50.025	6Y5RC	Kingston	FK17MX	40	F1A	AR	3/90
50.027	ZS6PW/B	Pretoria	KG44—	—	—	RadCom	11/89
50.0275	JA7ZMA	Fukushima City	QM07—	—	—	ZL3TY	2/4/90
50.030	CT0WW	Portugal	IN61GE	40	F1A	AR	3/90
50.032	ZS5SIX	South Africa	KG50—	—	—	AR	3/90
50.033	ZD8VHF	Ascension Is.	II22TB	50	A1A	AR	3/90
50.035	ZB2VHF	Gibraltar	IM76HE	100	A1A	AR	3/90
50.035	ZS3VHF	South Africa	JG87	—	—	AR	3/90
50.038	FY7THF	French Guiana	GJ35—	100	F1A	AR	3/90
50.040	SV1SIX	Greece	—	—	—	RadCom	7/89†
50.0425	GB3CTC	St Austell	IO70OJ	—	—	RadCom	3/90*
50.045	OX3VHF	Greenland	GP60QQ	20	A1A	AR	3/90†
50.048	TG4BFK	Guatemala	IO91—	—	—	AR	3/90
50.048	VE6ARC	Grand Praire	DO75—	50	A1A	ARRL Dir	89/90†
50.050	GB3NHQ	Potters Bar	IO91VQ	15	F1A	RadCom	12/89
50.050	ZS6DN	Pretoria	KG44—	—	A1A	AR	3/89
50.055	Z86LN/B	South Africa	KG46—	10	—	RadCom	11/89
50.056	VK8VF	Darwin	PH57—	—	—	AR	3/90
50.0575	TF3SIX	Iceland	HP94CC	50	A1A	AR	3/90
50.060	GB3RMK	Inverness	IO77UO	40	F1A	RadCom	12/89
50.062	PY2AA	Sao Paulo	GG66—	25	A1A	AR	12/89
50.062	GB3NGI	Garvagh	IO65PA	15	F1A	RadCom	12/89
50.063	KH6HI	Hawaii	BL01—	—	—	AR	3/90
50.064	WD7Z/B	Arizona	EL59—	75	—	ZL3AAU	1/3/90
50.065	GB3IO	Jersey	IN89—	8	F1A	RadCom	12/89
50.065	NB30/1	Rhode Is.	FN41—	100	—	AR	3/90
50.065	WD7X/B	New Mexico	DM75—	—	—	ZL3AAU	12/3/89†
50.066	VK6RPR	Perth	OF78—	10	F1A	AR	3/90
50.067	WA6IJZ	Oxnard CA	DM04—	70	A1A	ARRL Dir	89/90†
50.068	K6FV/B	Woodside CA	CM87UL	100	A1A	ZL3AAU	14/4/90
50.073	ZS4SA	Deneysville	KG33—	—	—	RadCom	11/89
50.075	VS6SIX	Hong Kong	OL72—	30	—	AR	3/90
50.078	TI22NA	Costa Rica	EK70—	20	A1A	AR	3/90
50.080	HC8SIX	Galapagos Is.	EI59—	10	A1A	AR	3/90
50.080	KH6JJK	Hawaii	BL11—	5	—	AR	3/90
50.085	9H1SIX	Malta	JM75FV	25	A1A	AR	3/90
50.086	VP2MO	Montserrat	FK86—	10	A1A	AR	3/90
50.088	VE1SIX	New Brunswick	FN65—	50	A1A	AR	3/90
50.090	KJ6BZ	Johnston Is.	AK56—	10	—	AR	3/90
50.092	W5GTP	Louisiana	#M40—	30	A1A	AR	3/90
50.099	KP4EKG	Puerto Rico	FK68—	—	—	AR	3/90
50.099	VP5D	Turks & Caicos	FL31—	10	—	ZL3AAU	2/4/90
50.100	HC2FG	Ecuador	FI07—	8	A1A	AR	3/90
50.100	KG6DX	Guam	QK23KL	40	A1A	AR	3/90
50.100	5H1HK	Tanzania	—	—	—	AR	3/90
50.100	ZS3E	—	JG87—	—	—	ZL2BGL	26/2/89*
50.110	A61XL	United Arab Emirates	LL74—	50	—	AR	3/90
50.120	4S7EA	Sri Lanka	MJ97—	50	—	AR	3/90
50.321	ZS5SIX	South Africa	KG50—	—	—	AR	3/90
50.490	JG1ZGW	Tokyo	PM95—	10	A1A	AR	3/90
50.499	5B4CY	Zyyi	KM54PS	15	FIA	AR	3/90
50.904	ZS1SIX		KF05—	25	F1A	RadCom	11/90
			★★★★★★				
51.030	ZL2MHB	Napier	RF80—	10	F2	FMTAG	3/90*
			★★★★★★				
52.100	ZK2SIX	Niue	AH50—	—	F1A	AR	3/90
52.150	VK0CK	Macquarie Island	QD95—	—	—	AR	2/90†
52.200	VK8VF	Darwin	PH57—	15	F1A	AR	3/90
52.300	VK2RBH	Broken Hill	—	—	F1A	AR	2/89†
52.310	ZL3MHF	Aylesbury	RE66—	8	F2A	FMTAG	3/90
52.320	VK6RTT	Wickham	OG89—	—	F1A	AR	3/90
52.325	VK2RHV	Newcastle	QF57—	—	F1A	ZL3AAU	2/3/90
52.330	VK3RGG	Geelong	QF21—	4	F1A	AR	3/90
52.345	VK4ABP	Longreach	QG26—	—	—	AR	3/90
52.350	VK6RTU	Kalgoorlie	PF09—	—	F1A	AR	2/90
52.370	VK7RST	Hobart	QW37—	—	F1A	AR	3/90
52.410	VK1RCC	Mt Majura	—	—	—	AR	2/90
52.418	VK0MA	Mawson	MC12—	—	—	AR	2/89†
52.420	VK2RSY	Sydney	QF56—	—	F1A	ZL3AAU	23/2/90
52.425	VK2RGB	Gunnedah	QF59—	—	F1A	AR	3/90
52.435	VK3RMV	Hamilton	QF12—	—	F1A	AR	3/90
52.440	VK4RTL	Townsville	QH30—	—	F1A	AR	3/90
52.445	VK4RIK	Cairns	QH23—	—	—	AR	3/90
52.450	VK5VF	Mount Lofty	PF95—	—	A1A	AR	3/90
52.460	VK6RPH	Perth	OF78—	—	F1A	AR	3/90
52.465	VK6RTW	Albany	OF84—	—	F1A	AR	3/90
52.470	VK7RNT	Launceston	QE38—	—	F1A	AR	3/90
52.485	VK8RAS	Alice Springs	PG66—	—	F1A	AR	3/90
52.510	ZL2MHF	Mt Climie	RE78BU	4	F1	ZL2CD	30/3/90
			★★★★★★				
53.625	VK2RSN	Sugarloaf Range	—	—	—	AR	2/90
53.900	VK3RMS	Olinda	—	—	—	AR	2/90
			★★★★★★				

* Not Operational † Status Unknown "Source" callsigns indicate beacons heard in ZL UPDATED 16-3-90 Prepared by ZL3AAU

Conversion between Geodetic and Grid Locator systems

by EDMUND T. TYSON, N5JTY

This simple paper system lets you convert latitudes and longitudes to grid locators—and vice versa—*without* a computer or calculator. Give it a try on your next "gridpedition"!

The grid locator system is widely used in Europe and North America for reporting station position during contacts at VHF and above. (in Europe this system is usually referred to as the Maidenhead Locator System.) One of the advantages of grid locators is that they describe positions in four or six characters—compared to the ten or fourteen characters necessary with the geodetic (latitude/longitude) system. A six-character grid locator describes a coarse position with its first two characters and, with successive characters, refines the position to an area 2.5' of latitude by 5' of longitude in size. This article describes a tabular method of converting between the grid locator and latitude/longitude systems.

Brief Anatomy of a Grid Locator

Of a full (six-character) grid locator, three characters (the first, third and fifth) specify longitude in steps of increasing precision; the remaining three characters (the second, fourth and sixth) specify latitude in steps of increasing precision (see Figure 1).

The first character (always a letter) of a grid locator specifies longitude in 20° increments, with the letter A correspondeing to the interval 180°W to 160°W, the letter B corresponding to the interval 160°W to 140°W, and so on until the letter R, which covers 160°E to 180°E longitude.

The second character in a grid locator specifies latitude in 10° increments. For instance, the letter A covers the interval from 90°S to 80°S, B covers 80°S to 70°S, and so on until R, which specifies latitudes from 80°N to 90°N. West longitudes and south latitudes are treated as *negative* values in the grid locator system; east longitudes and north latitudes are *positive*.

The third and fourth characters are digits in the range 0 through 9. The third character divides longitude lines into 2° increments; the fourth character divides latitude zones into 1° increments.

The last two characters (always letters) in a grid locator subdivide the 2°×1° rectangles designated by the third and fourth characters into smaller rectangles that are 5'×2.5' of arc in size. The letters A through X are used to specify each co-ordinate of these 5'×2.5' rectangles.

Conversion tables

Tables 1 through 6 inclusive can be used to convert latitude and longitude to grid locators, or grid locators to latitude and longitude.

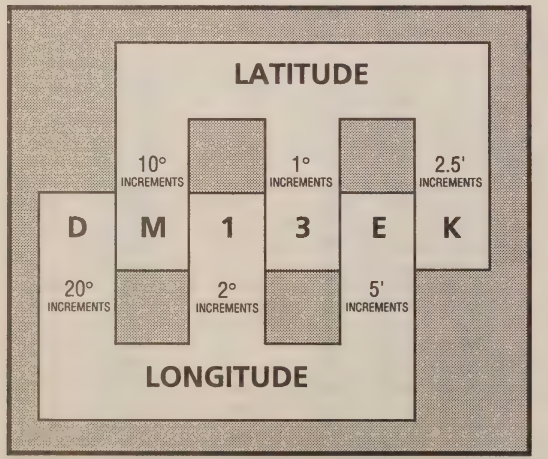


Figure 1.

Table 1
1st Longitude Character

Degrees Longitude ↓	Letter
−180	
−160	
−140	
−120	
−100	
−80	
−60	
−40	
−20	
0	
+20	
+40	
+60	
+80	
+100	
+120	
+140	
+160	
+180	

Table 2
2nd Longitude Character

Degrees Longitude ↓	Number ↑	Degrees Longitude ↓
−20	0	0
−18	1	+2
−16	2	+4
−14	3	+6
−12	4	+8
−10	5	+10
−8	6	+12
−6	7	+14
−4	8	+16
−2	9	+18
0		+20

Table 3
3rd Longitude Character

Minutes Longitude ↓	Letter ↑	Minutes Longitude ↓
−120	A	0
−115	B	+5
−110	C	+10
−105	D	+15
−100	E	+20
−95	F	+25
−90	G	+30
−85	H	+35
−80	I	+40
−75	J	+45
−70	K	+50
−65	L	+55
−60	M	+60
−55	N	+65
−50	O	+70
−45	P	+75
−40	Q	+80
−35	R	+85
−30	S	+90
−25	T	+95
−20	U	+100
−15	V	+105
−10	W	+110
−5	X	+115
0		+120

Converting Latitude and Longitude to Grid Locators

Example: The location of an observatory at 105° 44.0'W longitude and 32° 58.8'N latitude can be readily converted to a grid locator. Find the longitude characters first. (Remember: West longitude is negative in the grid locator system.) According to Table 1, the first grid character is D because the observatory's longitude is between −100° and −120°. Record the first character of the unknown locator, leaving space for the characters to come:

D — — — — —

(For values of longitude that are exact multiples of 20°, *work from zero* and choose the grid locator letter "above" the correct exact latitude value. For examples: −120° longitude = C, not D; +20° longitude = K, not J. Apply this "use the higher letter or number" rule to Tables 1 through 6 whenever you must work with exact multiples of the longitude and latitude increments reflected in the tables.)

So far, we have accounted for exactly 100° of the observatory's longitude. Find the second longitude character by referring to Table 2 for the number corresponding to the longitude remainder, −5° 44.0'. Because −5° 44.0' falls within the −4° to −6° range, the number is 7. We now have *two* characters of the grid locator:

D — 7 — — —

Table 4
1st Latitude Character

Degrees Latitude ↓	Letter ↑
-90	
	A
-80	
	B
-70	
	C
-60	
	D
-50	
	E
-40	
	F
-30	
	G
-20	
	H
-10	
	I
0	
	J
+10	
	K
+20	
	L
+30	
	M
+40	
	N
+50	
	O
+60	
	P
+70	
	Q
+80	
	R
+90	

Table 5
2nd Latitude Character

Degrees Latitude ↓	Number ↑	Degrees Latitude ↓
-10		0
	0	
-9		+1
	1	
-8		+2
	2	
-7		+3
	3	
-6		+4
	4	
-5		+5
	5	
-4		+6
	6	
-3		+7
	7	
-2		+8
	8	
-1		+9
	9	
0		+10

Table 6
3rd Latitude Character

Minutes Latitude ↓	Letter ↑	Minutes Latitude ↓
-60.0		0.0
	A	
-57.5		+2.5
	B	
-55.0		+5.0
	C	
-52.5		+7.5
	D	
-50.0		+10.0
	E	
-47.5		+12.5
	F	
-45.0		+15.0
	G	
-42.5		+17.5
	H	
-40.0		+20.0
	I	
-37.5		+22.5
	J	
-35.0		+25.0
	K	
-32.5		+27.5
	L	
-30.0		+30.0
	M	
-27.5		+32.5
	N	
-25.0		+35.0
	O	
-22.5		+37.5
	P	
-20.0		+40.0
	Q	
-17.5		+42.5
	R	
-15.0		+45.0
	S	
-12.5		+47.5
	T	
-10.0		+50.0
	U	
-7.5		+52.5
	V	
-5.0		+55.0
	W	
-2.5		+57.5
	X	
0.0		+60.0

able 7
ample Grid Locators

City	Longitude	Latitude	Locator
Munich	11° 36.5' E	48° 8.8' N	JN58TD
Montevideo	56° 12.7' W	34° 54.6' S	GD15VC
Washington DC	77° 3.9' W	38° 55.2' N	FM18LW
Wellington	174° 44.7' E	41° 17.0' S	RE78IR

Remember: West longitudes and south latitudes are treated as *negative* values in the grid locator system; east longitudes and north latitudes are *positive*.

PREVENT PIRATES
make sure you sell your transmitter to a licensed amateur.

Now we have accounted for exactly 104° of the observatory's −105° 44.0' longitude. Use Table 3 to find the letter that corresponds to the remaining −1° 44.0' of longitude. Expressed in minutes −1° 44.0' = −60' + −44.0', or −104.0'. This number falls within the range −100' to −105' range, so the third longitude letter is D. Now we have all three longitude characters of the unknown grid locator:

D — 7 — D —

The three latitude characters come next. The observatory's latitude is 32° 58.8' N. This is a *positive* latitude in the grid locator system. According to Table 4, the first latitude character is M because the observatory's latitude is between +30° and +40°. We now have four grid characters:

DM7 — D —

The most significant latitude character, M, accounts for exactly 30° of the observatory's latitude. Find the second latitude character by referring to Table 5 for the number corresponding to the latitude remainder, +2° 58.8'. Because +2° 58.8' falls in the +2° to +3° range, that number is 2. We now have *five* grid locator characters:

DM72D —

So far, we have accounted for exactly 32° of the observatory's +32° 58.8' latitude. Use Table 6 to find the letter corresponding to the remaining +58.8' of latitude. Because 58.8' falls within the +57.5' to +60.0' range, that letter is X. We now have the observatory's complete grid locator: DM72DX.

Converting Grid Locators to Latitude and Longitude

The conversion of grid locators to geodetic co-ordinates can be illustrated with the grid locator DM13EK. The geodetic co-ordinates we find will correspond to the *exact centre* of the region specified by DM13EK. As before, it's useful to separate the grid locator into elements of longitude and latitude. Also as before, we'll do the longitude first:

D = −100°
1 = −16°
E = −1° 35'
Round = 0° 2.5'
Sum = −117° 37.5', or 117° 37.5'W

The rounding term is used to compute the longitude of the *centre* of the specified region—a region 5'×2.5' (longitude by latitude) in size because DM13EK is a six-character locator. We know that the longitudinal centre of this region must lie somewhere along a line half—2.5'—of the region's longitudinal width (5') from its eastern and western edges, so the longitude rounding term is 2.5'. (The rounding term must carry the same sign as that of the other co-ordinate digits [negative rounding terms for negative longitudes and latitudes, positive rounding terms for positive longitudes and latitudes].) Next we'll calculate the *latitude* specified by DM13EK:

M = +30°
3 = +3°
K = +0° 25'
Round = 0° 1.25'
Sum = +33° 26.25', or 33° 26.25'N latitude

For six-character locators, the latitude rounding term is 1.25' because the region designated by a six-character locator is 2.5' wide in latitude. Again, the rounding term must carry the same sign as that of the other co-ordinate digits.

For *four*-character (grid-square) locators, the rounding terms are 1° (longitude) and 30' (latitude) because grid squares are 2°×1° (longitude by latitude) in size. As before, the grid-square rounding terms must carry the same sign as that of the other digits in their respective co-ordinates.

For more examples of grid locators, see Table 7. Use the co-ordinates and grid locators shown there as a basis for practice in converting geodetic co-ordinates to grid locators, and vice-versa.

The *Rand-McNally Road Atlas* can be used for estimating station locations by interpolating between the geodetic co-ordinates marked on the edges of the atlas' state maps. For the highest precision, use US Geological Survey quad sheets that cover your areas of interest.

Summary

Tables 1 through 6, inclusive provide a field-transportable method of converting between the geodetic and grid-locator systems. For Field Day exercises and VHF/UHF contests, the tables provide a means of cross-checking station co-ordinates when the station computer has been left at home.

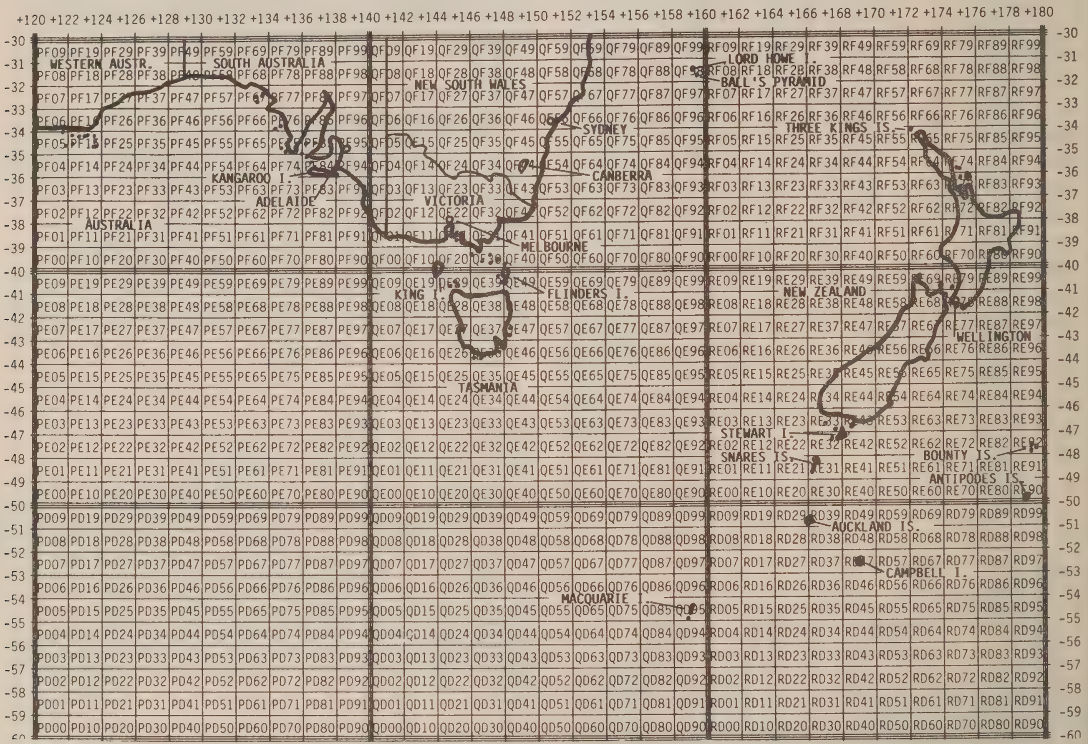
References

J. Lindholm, "VHF/UHF Century Club Awards", *QST*, January 1983, pp 49–51.

W. Overbeck, "A Universal Grid-Locator Program for Your Personal Computer", *QST*, December 1986, pp 30–31.

Edmund T. Tyson became interested in Amateur Radio in the early 1940s. Entering military service in 1944, he worked in various career fields involving electronics. Assigned to Wright Field in 1953, Ed worked on airborne TV systems for reconnaissance. In 1957, he was assigned as project engineer to establish and operate an observatory for tracking and photographing satellites. Retiring after 33 years of military and civilian service, Ed has been involved in designing and building electronic and computer equipment for astronomical applications. He is currently involved in relocating a 48-inch telescope from New Mexico to California. He was licensed as a Technician in 1986 and upgraded to Advanced Class in 1988.

Thanks to QST for permission to reprint this article.



Australian 2 metre Simplex Frequencies

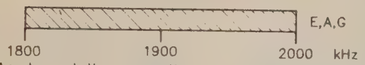
Frequency (MHz)	Recommended Use	Frequency (MHz)	Recommended Use
146.450	Primary Voice	147.425	ATV Liaison
146.500	National calling (primary)	147.450	ATV/SSTV/FAX
146.600	RTTY	147.475	SSTV/FAX Liaison
147.300	ATV Liaison	147.500	National calling (secondary)
147.325	RTTY	147.550	Micro nets
147.350	RTTY	147.575	Data nets
147.400	ATV Liaison	147.600	Data packet

Notes:
1. FM channels spacing is 25kHz and repeater offset is 600kHz.
2. FM channel numbers designated by last four digits of (repeater output) frequency.

US AMATEUR BANDS

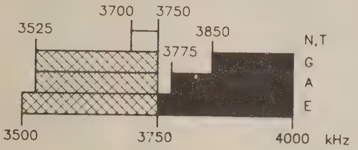
Revised November 15, 1989

160 METERS



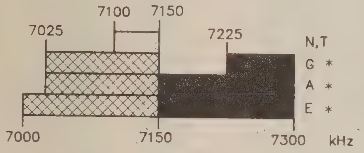
Amateur stations operating at 1900–2000 kHz must not cause harmful interference to the radiolocation service and are afforded no protection from radiolocation operations.

80 METERS



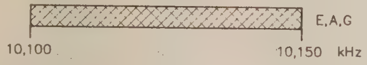
5167.5 kHz (SSB only): Alaska emergency use only.

40 METERS



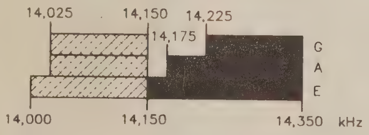
* Phone operation is allowed on 7075–7100 kHz in Puerto Rico, US Virgin islands and areas of the Caribbean south of 20 degrees north latitude; and in Hawaii and areas near ITU Region 3, including Alaska.

30 METERS

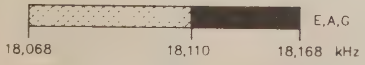


Maximum power on 30 meters is 200 watts PEP output. Amateurs must avoid interference to the fixed service outside the US.

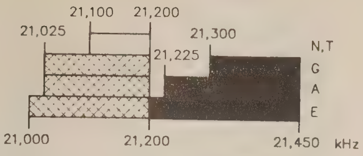
20 METERS



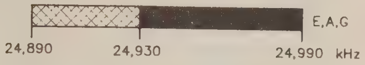
17 METERS



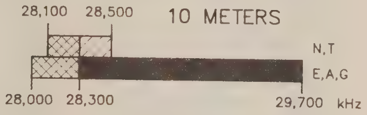
15 METERS



12 METERS

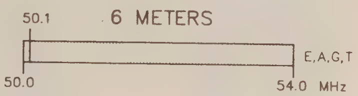


10 METERS

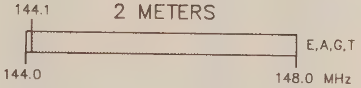


Novices and Technicians are limited to 200 watts PEP output on 10 meters.

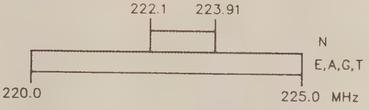
6 METERS



2 METERS

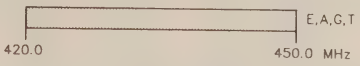


1.25 METERS

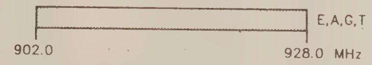


Novices are limited to 25 watts PEP output from 222.1 to 223.91 MHz.

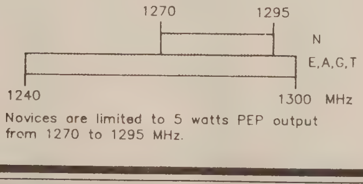
70 CENTIMETERS



33 CENTIMETERS



23 CENTIMETERS



Novices are limited to 5 watts PEP output from 1270 to 1295 MHz.

US AMATEUR POWER LIMITS

At all times, transmitter power should be kept down to that necessary to carry out the desired communications. Power is rated in watts PEP output. Unless otherwise stated, the maximum power output is 1500 W. Power for all license classes is limited to 200 W in the 10,100–10,150 kHz band and in all Novice subbands below 28,100 kHz. Novices and Technicians are restricted to 200 W in the 28,100–28,500 kHz subbands In addition, Novices are restricted to 25 W in the 222.1–223.91 MHz subband and 5 W in the 1270–1295 MHz subband.

Operators with Technician class licenses and above may operate on all bands above 50 MHz. For more detailed information see The FCC Rule Book.

KEY

▩ = CW, RTTY and data
☐ = CW, RTTY, data, MCW, phone and image
■ = CW, phone and image
▨ = CW and SSB
▧ = CW, RTTY, data, phone, and image
☐ = CW only

E =AMATEUR EXTRA
A =ADVANCED
G =GENERAL
T =TECHNICIAN
N =NOVICE

Australian Duplex Repeater List February 1990

OUTPUT TXFREQ	INPUT RXFREQ	SITE		COVERAGE
146.9000	146.3000	Black Hill	VK1RAC	Canberra
146.9500	146.3500	Mt Ginini	VK1RGI	S.E. NSW
438.3750	433.3750	Isaacs Ridge North	VK1RIR	Canberra
438.5250	433.5250	Mt Ginini	VK1RGI	S.E. NSW
29.6200	29.5200		VK2RAH	Wollongong
53.6250	52.6250	Sugarloaf Range	VK2RSN	Newcastle
53.8500	52.8500	Dural	VK2RWI	Sydney
146.6250	146.0250	Byron Bay	VK2RBB	Byron Bay
146.6250	146.0250	Razorback	VK2RLD	Sydney
146.6500	146.0500	Mt Coramba	VK2RCH	Coff's Harbour
146.6500	146.0500	Mt Bindo	VK2RDX	Oberon
146.6500	146.0500	Terry Hie Hie	VK2RMI	Moree/Inverell
146.6750	146.0750	Blacktown (RTTY)	VK2RTY	Sydney
146.7000	146.1000	Mt Canobolas	VK2RAO	Orange
146.7000	146.1000	Milton	VK2RMU	Ulladulla
146.7000	146.1000	Middle Brother	VK2RPM	Taree
146.7250	146.1250	Sombersby	VK2RAG	Gosford
146.7500	146.1500	Mumbulla Mt	VK2RFS	Bega
146.7500	146.1500	Mt Gibraltar	VK2RHR	Sth. Highlands
146.7500	146.1500	Mt Crawney	VK2RTM	Tamworth
146.7500	146.1500	Mt Flackney	VK2RWG	Wagga Wagga
146.7750	146.1750	Sugarloaf Range	VK2RTZ	Newcastle
146.8000	146.2000	Needle Mtn	VK2RCC	Coonabarabran
146.8000	146.2000	Goonellabah	VK2RIC	Lismore/Casino
146.8000	146.2000	Heathcote	VK2RLE	Sydney
146.8000	146.2000	Kendell Trig	VK2RTD	Tumut
146.8250	146.2250	Bundook Mountain	VK2RET	
146.8500	146.2500	Mt Kaputar	VK2RAB	Gunnedah
146.8500	146.2500	Mt Murray	VK2RAW	Wollongong
146.8500	146.2500	Mt Bingar	VK2RGF	Griffith
146.8750	146.2750	Terrey Hills	VK2RMB	Sydney
146.9000	146.3000	Mt Sugarloaf	VK2RAN	Lwr. Hunter
146.9000	146.3000	Boona Mount	VK2RRT	Condoblin
146.9250	146.3250	North Ryde	VK2RGR	Sydney
146.9500	146.3500	Glenn Innes	VK2RNE	Glen Innes
146.9750	146.3750	Mt Sugarloaf (RTTY)	VK2RAN	Newcastle
147.000	146.4000	Dural	VK2RWI	Sydney
147.0250	147.6250	Paddington	VK2ROT	Sydney
147.0500	147.6500	Mount Druitt	VK2RBM	Nepean/Blue Mts
147.1000	147.7000	Grenfell	VK2RWM	Grenfell
147.1000	147.7000	Mt Arthur	VK2RZL	Upper Hunter
147.1500	147.7500	Chatswood	VK2RWS	Sydney
147.2000	147.8000	Mt Cambewarra	VK2RSD	Nowra
147.2250	147.8250	Lane Cove	VK2RST	Sydney
147.2500	147.8500	Asquith	VK2RNS	Sydney
147.2750	147.8750	Sublime Point (R/V)	VK2RIL	Wollongong
147.3000	147.9000	Springwood	VK2RTS	Lwr Blue Mts
147.3750	147.9750	Cabbage Tree Mtn	VK2RGL	
147.9250	147.3250	Mt Gray	VK2RGN	Goulburn
438.0750	433.0750	Somersby	VK2RAG	Gosford
438.1750	433.1750	Terrey Hills	VK2RMB	Sydney
438.1750	433.1750	Doughboy Mountain	VK2RNT	Armidale
438.2250	433.2250	Port Kembla	VK2RUW	Wollongong
438.2750	433.2750	Chatswood	VK2RWS	Sydney
438.3250	433.3250	Mt Marie	VK2REE	Taree
438.3250	433.3250	Grenfell	VK2RWM	Grenfell
438.3750	433.3750	Kurrajong Heights	VK2RUT	Kurrajong
438.4250	433.4250	Hurstville	VK2RUH	Sydney
438.4750	433.4750	Chatswood	VK2RRS	Sydney
438.5250	433.5250	Middle Brother	VK2RPM	Pt. Macquarie
438.5250	433.5250	Dural	VK2RWI	Sydney
438.6250	433.6250	Merewether	VK2RUM	Newcastle
438.6750	433.6750	Mt Sugarloaf	VK2RAN	Newcastle
438.6750	433.6750	Nightcap Range	VK2RSC	Lismore/Casino
438.6750	433.6750	Willans Hill	VK2RTW	Wagga Wagga
438.7250	433.7250	Sublime point	VK2RIL	Wollongong
1281.7500	1293.7500	Dural	VK2RWI	Sydney
29.6400	29.5400		VK3RHF	Melbourne
53.5500	52.5500	Wattle Glen	VK3RMH	Melbourne
53.5750	52.5750	Dandenong	VK3RDD	Melbourne
53.6750	52.6750	Lake Mountain	VK3RTN	Melbourne
53.9750	52.9750	Mt Buller	VK3RGM	Mt Buller
146.6500	146.0500	Donalds Knob	VK3REG	East Gippsland
146.6500	146.0500	Mt Wombat	VK3RGV	Shepparton
146.7000	146.1000	Mt Mitta Mitta	VK3RNC	Corryong
146.7000	146.1000	Ouyen	VK3RON	Ouyen
146.7500	146.1500	Mt Bunninyong	VK3RBA	Ballarat
146.8000	146.2000	Mt Tassie	VK3RLV	Latrobe Valley
146.8000	146.2000	Mildura	VK3RMA	Mildura
146.8500	146.2500	Kinglake	VK3RMN	
146.9000	146.3000	Smeaton Hill	VK3RBS	Ballarat
146.9000	146.3000	Mt Nowa Nowa	VK3REB	Bairnsdale
146.9000	146.3000	Swan Hill	VK3RSH	Swan Hill
146.9500	146.3500	Mt William	VK3RWZ	The Grampian
147.0000	146.4000	Mt Anakie	VK3RGL	Geelong
147.0000	146.4000	Mt Big Ben	VK3RNE	Wodonga
147.0250	147.6250	Mt Fatigue	VK3RGS	Toora
147.0500	147.6500	Mt Livingstone	VK3RGO	Omeo
147.0500	147.6500	Robinvale	VK3RVL	Robinvale
147.0500	147.6500	Mt Warrnambool	VK3RWL	Warrnambool
147.0750	147.6750	Heathmont	VK3RCR	Melbourne
147.1000	147.7000	Mt Porepunkah	VK3RPB	Bright
147.1000	147.7000	Bass Hill	VK3RSG	Sth Gippsland
147.1250	147.7250	Geelong	VK3RGC	Geelong
147.1500	147.7500	Mt Alexander	VK3RCV	Bendigo
147.1750	147.7750	Olinda	VK3REC	Melbourne
147.2250	147.8250	Mt Baw Baw	VK3RWG	West Gippsland
147.2500	147.8500	Mt Macedon	VK3RMM	Melbourne
147.2750	147.8750	Mt Cawley	VK3ROW	Colac
147.3000	147.9000	Victoria Wide	VK3RWP	Wicen portable
147.3500	147.9500	Olinda	VK3RTY	RTTY Melbourne
434.2750	439.2750	Mt Macedon	VK3RMM	Wicen Melb.
438.0750	433.0750	Mt St Leonard	VK3RMU	Melbourne
438.1750	433.1750	Devils River	VK3RUG	Alexandra
438.2250	433.2250	Olinda	VK3ROU	Melbourne
438.2750	433.2750	Victoria Wide	VK3RWE	Wicen Portable
438.3750	433.3750	Carrajong	VK3RGU	Gippsland
438.4750	433.4750	Mt Hollowback	VK3RBU	Ballarat
438.4750	433.4750	Bendigo	VK3RCV	Bendigo
438.5250	433.5250	Mitcham	VK3RAD	Melbourne
438.5250	433.5250	Mt Stanley	VK3RNU	Wangaratta
438.5250	433.5250	Merbein	VK3RRU	Mildura
438.6250	433.6250	Victoria Wide	VK3RWI	Wicen Portable
438.6750	433.6750	Mt William	VK3RWU	The Grampians
439.3750	434.3750	Glen Waverley	VK3RSE	Melbourne
439.4250	434.4250	Chesney Vale	VK3RDU	Benalla
439.5750	434.5750	Mt Anakie	VK3RGL	Geelong
439.7250	434.7250	Arthurs Seat	VK3RPU	Melbourne
53.7250	52.7250	Calliope Range	VK4RGA	Gladstone
53.7250	53.1250	Mount Haren	VK4RIK	Cairns & Dist
146.6250	146.0250	Gladstone	VK4RGT	Gladstone
146.6500	146.0500	Roma	VK4ROM	Roma
146.6750	146.0750	Mt Kiangarow	VK4RET	
146.6750	146.0750	Longlands Gap	VK4RTA	Atherton
146.7000	146.1000	Mt Archer	VK4RAR	Rockhampton
146.7000	146.1000	Mt Stuart	VK4RAT	Townsville
146.7000	146.1000	Springbrook	VK4RGC	Gold Coast
146.7000	146.1000	Mount Isa	VK4RMI	Mount Isa
146.7250	146.1250	Mt Gordon	VK4RSB	Bowen
146.7500	146.1500	Mt Lofty	VK4RDD	Toowoomba
146.7750	146.1750	Prosperine	VK4RDY	
146.8000	146.2000	Mt Goonaneman	VK4RBU	Bundaberg
146.8000	146.2000	Thursday Island	VK4RTI	
146.8000	146.3500	Weipa	VK4RWP	Cape York
146.8500	146.2500	Buderim	VK4RSC	Sunshine Coast
146.8750	146.2750	Chinchilla	VK4RCH	Chinchilla
146.9000	146.3000	Mt Stradbroke	VK4RAI	Ipswich
146.9000	146.3000	Calliope Range	VK4RGA	Gladstone
146.9250	146.3250	Mount Mee	VK4RRC	Redcliff
146.9500	146.3500	Mt Bellenden Ker	VK4RCA	Cairns
146.9750	146.3750	Blue Mtn Nebo	VK4RRR	Sarina
147.0000	146.4000	Mt Glorious	VK4RBN	Brisbane
147.0000	146.4000	Black Mtn	VK4RMK	Mackay
147.1000	147.7000	Boulder Mtn	VK4RGY	Gympie
147.1500	147.7500	Spring Hill	VK4RAG	Brisbane
147.1500	147.7500	Kedron	VK4RWI	Wicen Portable
147.3000	147.9000	Mt Glorious	VK4RQT	Brisbane & Dist.
147.3500	147.9500	Mt Inkerman	VK4RII	Burdekin
147.6500	147.0500	Mt Cotton	VK4RBT	Brisbane
147.6750	147.0750	Mt Cotton	VK4RBT	Brisbane
147.8250	147.2250	Manly West	VK4REG	Brisbane
147.8500	147.2500	Mt Devlin	VK4RCB	
438.0250	433.0250	Mt Tamborine	VK4RTQ	Brisbane & Dist.
438.0750	433.0750	Buderim	VK4RSC	Sunshine Coast
438.2250	433.2250	Mt Stuart	VK4RAT	Townsville
438.2250	433.2250	Springbrook	VK4RGC	Gold Coast
438.3750	433.3750	Ipswich	VK4RWM	Ipswich
438.4250	433.4250	Prosperine	VK4RMU	Mackay
438.4750	433.4750	Maleny	VK4RXX	
438.5000	433.5000	Hodgson Range	VK4RHR	Clermont

OUTPUT TXFREQ	INPUT RXFREQ	SITE		COVERAGE
438.5250	433.5250	Mt Coot-Tha	VK4RBC	Brisbane
438.6250	433.6250	Spring Hill	VK4RAG	Brisbane
438.6250	433.6250	Kedron	VK4RWI	Wicen Portable
438.6750	433.6750	Mt Goonaneman	VK4RBU	Bundaberg
438.7000	433.7000	Mt Mowbullan	VK4RDG	Darling Downs
438.8250	433.8250	Mt Boulder	VK4RGY	Gympie
438.9500	433.9500	Redbank Plains	VK4RBA	Brisbane
439.2750	434.2750	Toowoomba	VK4RDU	Toowoomba
439.3500	434.3500	Mount Haren	VK4RIK	Cairns & Dist.
146.6500	146.0500	Naracoorte	VK4RNC	Naracoorte
146.6750	146.0750	O'Halloran Hill	VK5RSV	
146.7000	146.1000	The Bluff	VK5RMN	Pt Pirie & Dist.
146.8000	146.2000	Coolanie	VK5REP	Cowell
146.8250	146.2250	Angaston	VK5RBV	Barossa Valley
146.8500	146.2500	Houghton	VK5RHO	Adelaide
146.9000	146.3000	Mount Gambier	VK5RMG	Mt Gambier
147.0000	146.4000	Crafers	VK5RAD	Adelaide
438.3250	433.3250	Mount Gambier	VK5ROH	
438.4250	433.4250	Angaston	VK5RBV	Barossa Valley
438.5250	433.5250	Crafers	VK5RVP	Adelaide
1381.2500	1261.2500		VK5RWH	Adelaide
29.6300	29.5300		VK6RHF	Perth
53.8000	52.0000	Tic Hill	VK6RTH	Perth
146.6500	146.0500	Bunbury	VK6RSW	Bunbury
146.6750	146.0750	Whim Creek	VK6RCA	Carnarvon
146.7000	146.1000	Roleystone	VK6RAP	Perth
146.7250	146.1250	Albany	VK6RAL	Albany
146.7500	146.1500	Esperance	VK6RES	Esperance
146.7500	146.1500	Koolan Island	VK6RKI	Koolan Island
146.7500	146.1500	Lesmurdie	VK6RLM	Perth
146.8000	146.2000	Tic Hill	VK6RTH	Perth
146.8000	146.2000	Karratha	VK6RWP	Karratha
146.8250	146.2250	Mt Barker	VK6RAA	Albany
146.8500	146.2500	Northwest Cape	VK6REX	Exmouth
146.8500	146.2500	Kambalda	VK6RKB	Kalgoorlie
146.8750	146.2750	O'Connor	VK6RSR	Perth
146.9000	146.3000	Mt William	VK6RMW	Bunbury
146.9500	146.3500		VK6RPD	Perth
146.9500	146.3500	Shay Gap	VK6RSG	Shay Gap
146.9750	146.3750	State Wide	VK6REE	Wicen Portable
147.0000	146.4000	Kalgoorlie	VK6RAK	Kalgoorlie
147.0000	146.4000	Fairfield	VK6RAW	Katanning
147.0000	146.4000	State Wide	VK6REE	Wicen Portable
147.4000	146.4000		VK6RGN	Geraldton
147.0000	146.0000	Port Hedland	VK6RNW	Port Hedland
147.0500	147.6500	Roleystone	VK6RTY	RTTY Perth
147.1000	147.7000	Mt Mambup	VK6RWC	Perth
147.1750	147.7750	W A Wide	VK6RIC	Wicen Portable
147.2000	147.8000	Cataby	VK6RCT	Cataby
147.2250	147.8250	Hoddywell	VK6RHW	Toodyay
147.2500	147.8500	Saddleback	VK6RMS	Boddington
147.3000	147.9000	Ocean Hill	VK6REN	Eneabba
147.3500	147.9500	Busselton	VK6RBN	Busselton
438.2250	433.2250	Tic Hill	VK6RTH	Perth
438.5250	433.5250	Roleystone	VK6RUF	Perth
438.6750	433.6750	Busselton	VK6RBN	Busselton
53.8250	52.8250	Mt Duncan	VK7RMD	Hobart
146.6250	146.0250	Mt Duncan	VK7RAD	Rt/Data Hobart
146.7000	146.1000	Mt Wellington	VK7RHT	Hobart
146.7500	146.1500	West Ulverstone	VK7RNW	Ulverstone
146.9000	146.3000	Snow Hill	VK7REC	East Tas
147.0000	146.4000	Mt Barrow	VK7RAA	NE Tas
147.2500	147.850	Mt Faulkner	VK7RAF	Hobart
438.5000	433.5000	Barren Tier	VK7RIN	Central Tas
438.5500	433.5500	Mt Arthur	VK7RAB	NE Tas
438.5750	433.5750	Millers Bluff	VK7RER	
438.6000	433.6000	Mt Nelson	VK7RTC	Hobart
438.6500	433.6500	Table Cape	VK7RAC	NW Tas
146.6500	146.0500	Nhulunbuy	VK8RMS	Gove
146.7000	146.1000	Karama	VK8RDA	Darwin
146.9500	146.3500	Alice Springs	VK8RCA	Alice Springs
147.0000	146.4000	Palmerston	VK8RTE	Darwin
438.2750	433.2750	Darwin	VK8RDN	Darwin

Australian 70cm Bandplan Operation

Repeater Output Frequency (MHz)	Recommended Use
433.025–433.725	FM repeater inputs
433.750–434.250	Simplex
434.275–434.975	FM repeater inputs
438.025–438.725	FM repeater outputs
438.025	Mobile voice
438.075	Mobile voice (secondary)
438.125	RTTY
438.175	Mobile voice
438.225	Mobile voice (secondary)
438.275	WICEN portable
438.325	Mobile voice
438.375	Mobile voice (secondary)
438.425	Mobile voice
438.475	Mobile voice
438.525	Mobile voice (national primary)
438.575	Data
438.625	WICEN portable
438.675	Mobile voice (secondary)
438.725	RTTY
438.750–439.250	FM simplex
438.775	RTTY
438.800	WICEN
438.825	Voice (secondary)
438.875	Data
438.925	RTTY
439.000	Voice (national primary)
439.050–439.075	Data packet
439.125	Voice secondary
438.275–439.975	FM repeater outputs
439.275	Mobile voice
439.325	RTTY
439.425	Mobile voice
439.475	RTTY
439.575	Mobile voice
439.725	Mobile voice
439.875	Mobile voice
439.975	SSTV

Notes:

1. FM channel spacing is 25kHz and repeater offset is 4MHz.
2. FM channel numbers designated by last four digits of (repeater output frequency).
3. FM channels with no specific recommended use may be used for any purpose.

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Amateur Satellites

by IRVING SPACKMAN ZL1MO

Worldwide and regional communications via amateur satellites has been possible as part of the Amateur Radio Service since the launch of OSCAR-6 back in 1972. Since that time 24 more have been successfully launched from sites in USA, USSR, French Guiana, and Japan.

One of the greatest difficulties at this time, is in fact the one that amateurs have the least control over—the launch vehicle! The relationship between the various launch agencies and the Amateur Satellite Organisations has always been one of close friendship and co-operation, and every opportunity for a "ride" has been gratefully accepted. However, the reduced frequency of non-commercial, or non-military launches with suitable spare space, at minimum cost, has meant that amateur launch opportunities have been very infrequent, and where opportunities for semi-commercial launches have been available, they have been very costly.

A change of approach recently, allowed other ways of achieving a low cost "ride" into orbit—that of designing our spacecraft to "fit" into areas otherwise unusable. Arianespace have developed a new structure—the Ariane Structure for Auxiliary Payloads (ASAP)—which has been specially designed to provide small secondary payloads with inexpensive launch opportunities, by housing them in what otherwise would be wasted space.

Another intriguing approach, which has been examined and found practical is to build our spacecraft into necessary, but discarded components for other spacecraft once they have attained orbit. This concept is being developed in the case of the Phase 4 program, where the adaptor ring, fitted to a Geostationary spacecraft, will be used as the housing for the Phase 4A spacecraft.

Satellite Frequency Allocations

International agreements have made provision for the Amateur Satellite Service to operate in the 7, 14, 21, 24, 29, 144, 435, and 1260MHz bands, plus the 2.4, 3.4, 5.6, 10, 24, 47, 75, 142 and 240GHz allocations. However, so far operation has only been seen in the following bands:

BAND	FREQUENCIES	REMARKS
15m	21.25 to 21.30MHz	Uplink frequency used
10m	29.30 to 29.50MHz	Downlinks frequency used
2m	145.80 to 146.00MHz	Both up and downlinks
70cm	435.00 to 438.00MHz	Both up and downlinks
23cm	1260 to 1270MHz	Uplink only permitted
13cm	2401 to 2402MHz	Downlink only permitted

Whilst operation in these frequency regions is set by international agreement at World Administrative Conferences, for many countries the ultimate decision as to whether the Satellite sub-bands are permitted is by authorisation of the administration of the specific country. Usage at local level is generally by "gentleman's agreement" observing "bandplans" laid down by specific Amateur Organisations such as the RSGB and NZART.

Satellite Modes and Terminology

OSCAR stands for "Orbital Satellite Carrying Amateur Radio", and "RS" is used to identify the predominant series of Russian Amateur satellites because they send RS in their identifying call, although the official designation by the Russians is "RADIO-1" through to "RADIO-11". UoSATS2, 3 or 4 (University of Surrey Satellites) are identified as UoSAT OSCARs 11, 14 and 15 respectively giving rise to the abbreviations UO-11 etc. Other amateur spacecraft launched by the Russians were named ISKRA (little spark!) and the latest satellite launched by Japan for JAMSAT/JARL as JAS-2 (Japan Amateur Satellite) has been called FUJI OSCAR-20 or FO-20.

The type of operation of satellite transponders is specified by THE MODE, which essentially is an indication of the specific frequencies being handled via the transponder. The current types are:

Mode	Uplink (MHz)	Downlink (MHz)
A	145.8–146.0	29.3–29.5
B	435.0–438.0	145.8–146.0
J	145.8–146.0	435.0–438.0
K	21.25–21.30	29.3–29.5
L	1260–1270	435.0–438.0
S	435.0–438.0	2401–2402
T	21.25–21.30	145.8–146.0

NOTE: In some cases two modes may be operated simultaneously.

The operating schedule of the satellite which will set the day/time the spacecraft may use a specific mode or be switched off can be implemented by direct ground control or under the supervision of an on-board computer system—the OBC or IHU (Integrated Housekeeping Unit as it is known in the Phase III series of OSCARs).

Current operational schedules may change from day to day, week to week, etc, so it is necessary to regularly check the most up-to-date and easily accessible sources. In some cases the satellite's own beacon transmissions or bulletins are such a source of up-to-the-minute information.

Orbital Information, parameters and Predictions

Every satellite is given one reference orbit each day. It is the first EQX (Northbound Equator Crossing) for that satellite after 0000UTC. So for example for UoSAT UO-11:- Satellite Cat. No. 14781; Date: March 8 1990. Orbit No. 32262 EQX 01:23:43; 63.72° W. Long.

To calculate the succeeding crossing times, it is only necessary to add the orbit period, and increment of West longitude as many times as is necessary to bring the spacecraft within the time or longitude of interest.

It should be noted that the predictions for all spacecraft are done in the manner above, with the exception of those in Geostationary orbit, who never effectively cross the equator, but merely rotate above it remaining essentially over the one spot on earth. Also EQX type predictions for a highly elliptical orbiting spacecraft such as Phase 3 OSCAR-13 are not much value to us users, since the satellite appears to hang in one place in the sky for perhaps 9 out of its 11½ hour orbit.

With the elliptical type of orbit it is more convenient to provide a prediction for when the satellite rises over our horizon (acquisition of satellite—AOS); the time of mid-point through its visible period; and the time it sets (Loss of Satellite—LOS). In addition a set of bearings in azimuth degrees relative to true North and elevation in degrees above the horizon, is given for a range of times throughout the visible part of the orbit to aid aiming directional antenna at the spacecraft.

Since most of the orbits of Amateur Satellites are well above the remnants of the earth's atmosphere there is little effect of friction, and consequently the parameters of the orbit change little from week to week. It is thus possible to provide reasonably accurate predictions up to several weeks ahead. They are currently available on a weekly basis on the Sunday VHF nets from Auckland and Waikato repeaters.

For further information regarding satellite prediction data you are invited to contact the writer enclosing a SASE.

Orbital parameters

The orbital reference data described earlier cannot be obtained accurately in a direct fashion, but is derived from more precise measurements known as Keplerian Orbital Elements, named after the mathematician and astronomer Johannes Kepler. He was able to formulate a set of rules which all orbiting bodies obey. This data is nowdays derived by radar, or optical observation of the particular spacecraft, and refined over a period of time by organisations such as NASA to produce a set of seven essential elements. These are:

INCLINATION; ECCENTRICITY; the RIGHT ASCENSION of ASCENDING NODE (in short RAAN); ARGUMENT of the PERIGEE; MEAN ANOMALY; MEAN MOTION; EPOCH Time.

In some cases a quantity called the SEMI-MAJOR AXIS or SMA is given as well as or in place of MEAN MOTION.

Other factors commonly given in association with the "elements" are the specific set number, the orbit number for which the other parameters apply, and the "drag" or first derivative of the mean motion which allows continuous correction of the data for the effects of atmospheric drag, the earth not being a true sphere, and the gravitational effects of moon and sun.

Access to "Element Sets", as they are called, on a regular basis can be achieved simply by sending an SASE to ZL1MO. They also can be requested from the various Nets detailed later and for those with Packet Capability probably from your local BBS.

Computer Satellite Predictions

In general the lower altitude polar-orbiting satellites which have inclinations ranging from 80 to 100 degrees are visible from anywhere in New Zéaland for periods ranging between 10 and 25 minutes on each of two or three consecutive passes, followed by a similar group 10 to 12 hours later.

If in one such group the satellite moves from north to south, then the next group will be in the opposite direction, as our point on the earth's surface appears under the other side of the orbit. The first useful orbit will appear to the east, the subsequent ones overhead or out to the west.

The exception to this rule occurs when spacecraft such as the Space Shuttle, or Orbiting Laboratories such as the Russian "MIR", are considered. When the orbit's inclination is around 50 degrees we find that we get a block of six to eight consecutive orbits within range, followed by a period of 10 to 12 hours when no orbits are visible. The sequence of the direction of passes are always the same but the apparent direction changes between first and last passes by about 260°.

Use of a personal computer to calculate orbital information such as AOS, TCA, LOS and bearing and elevation data between these points has become the norm for the regular satellite user. From the lowly but practical ZX81 and pocket computers through to all of the common brands to the IBM PCs and clones, the basis of most of the common programs used is Tom Clarke, W3IWI's "Basic Orbits" which was published in AMSAT's *Orbit* magazine for March/April 1981.

This program has been translated into various dialects of BASIC, and also Pascal for most popular home computers. There are also a number of other programs written by other satellite users, utilizing the unique capabilities of various computers to give a range of data formats plus graphic presentations, to dramatically portray the paths the satellite takes across the earth's surface, determine its "footprint" and whether there is "mutual visibility" between two stations, whilst computing and displaying the direction the spacecraft's antennas should be pointing, etc.

For further information you may contact the author, with an SASE, stating your requirements and type of computer.

Other sources of software are the publications: *Amateur Radio Software*, published by RSGB; *Satellite Tracking Software for the Radio Amateur*, by John Branegan GM4IHJ, available via the Sinclair Amateur Radio Users' Group; and pamphlets describing a wide range of software available from both AMSAT-NA and AMSAT-UK. There is also a range of software available particularly for the C-64 and IBM clones from AMSAT-VK.

Where do I get more information?

There are a number of books and magazines available to help those interested in amateur satellites. All the handbooks published by the National Societies have useful chapters as does the RSGB VHF/UHF Manual. A very good publication is *The Satellite Experimenters Handbook* published by the ARRL. This 200 page book contains a wealth of information on satellites, orbital prediction, and ground station equipment. Another useful publication *The UoSAT Spacecraft Data Booklet* is available from the University of Surrey whilst handbooks on AO-10, RS series, FO-20 and AO-13 are available from several sources.

AMSAT-UK publish *OSCAR NEWS* every two months. This excellent booklet contains a wealth of up-to-date data, and arrives by airmail within about two weeks of final preparation.

AMSAT-NA publish a newsletter type publication every few weeks, called *Amateur Satellite Report* (ASR). AMSAT-NA also publish a quarterly publication called *The AMSAT Journal*.

A monthly technical publication called *QEX* contains many excellent satellite related articles and is published by ARRL.

Another publication available a little closer to home is the AMSAT-VK monthly newsletter. Containing an up-to-date information, gathered from this part of the globe, it arrives by airmail within a week.

Enquiries regarding membership of AMSAT-NA; AMSAT-UK or AMSAT-VK, or subscription to QEX, can be obtained by enquiry to the author with an SASE.

Here in ZL, the author provides a *HOT-LINE-NEWS* monthly newsletter, containing latest information, Keplerian Elements, and satellite bulletins as of the end of each month. To receive details about this service contact the ZL1MO enclosing aa SASE.

There is a net operating each week—propagation and net controller permitting, on 14.282 and 7.103MHz simultaneously on Saturdays 2200hours. UTC (Sunday Morning NZ 1000hours) conducted by ZL1WN for VK, ZL and Pacific Islands. Information on this net is derived directly from AMSAT news sources with direct input from AMSAT editorial staff world- wide. Check-ins are taken for five to ten minutes prior to net time.

Both the Waikato 695 and Auckland 6625 VHF Sunday nights net is at 2015 also include a brief satellite report containing predictions and late breaking news.

If you have Packet capability, then a considerable amount of Satellite News can be found on your local BBS and for those with TELETEXT receiving facility, Page 304 is updated periodically with data.

Finally, those equipped to receive them, will find regular bulletins and data transmitted by the UoSAT UO-11 satellite at 1200 BPS NBFM, on the 145.825 downlink frequency.

For more information on these facilities contact the author enclosing an SASE.

Operational Satus of Current Spacecraft

UoSAT-2 (UO-11): Cat 14781

Beacons: 145.825; 435.025; 2401.5MHz

Data and Bulletins at 1200bps. FSK NBFM. Also transmissions on 435.025MHz at 4800bps. CCD image transmissions and Digitalker transmissions all under automatic Diary control. Digital Communication Experiment (DCE) in use between Gateway ground stations in many countries.

FUJI-OSCAR-20 (FO-20): Cat. 20480

Launched 7 February 1990. Inclination 99 degrees. Apogee 1740km. Perigee 912km.

Transponders: JA (SSB/CW). Uplink: 145.900–146.00MHz. Downlink: 435.900–435.800. CW Beacon: 100mW 435.795MHz;

JD (Digital BBS). Uplink: four channels 145.85, 145.87, 145.89 and 145.91MHz. Modulation 1200bps Manchester Encoded NBFM. Downlink: 435.91MHz 1W 1200bps BPSK also Beacon.

Depending on amount of solar illumination both transponders may be operating. More details in *Break-In*.

RS-10/11 (COSMOS 1861): Cat 18129

Note—the two systems are separate but carried on and using power from 1861.

Both RS-10 and 11 can operate under modes K, KA, T, KT.

RS-10: Uplink: 145.860–145.900MHz and/or 21.160–21.200MHz. Downlink: 29.360–29.400MHz and/or 145.860–145.900MHz. Beacon: 29.357/145.857/ 145.903MHz depending on Mode(s). Robot uplink: 21.120/ 145.820MHz. Downlink: 29.403MHz.

RS-11—Uplink: 145.910–145.950MHz and/or 21.210–21.250MHz. Downlink: 29.410–29.450MHz and/or 145.910–145.950MHz. Beacon 29.407/145.907/145.953MHz depending on Mode(s). Robot uplink: 21.170/145.870MHz. Downlink: 29.453MHz.

OSCAR-10: Cat 14129
Elliptical Orbit 26°. Long Period 11½ hours.

Limited Mode B operation possible depending on Satellite/Sun relationship. On-Board Computer (OBC) non-operational due to radiation damage to memory, thus preventing any attitude changes to spacecraft.

Mode-B uplink: 435.027–435.179MHz equates with Downlink: 145.977–145.825MHz (inverting).

General (145.810MHz) and Engineering (145.987MHz) Beacons not normally operational but may turn on under certain conditions.

For details of operating schedules see *Break-In* or contact ZL1MO.

OSCAR-13 (Phase IIIC): Cat. 19216
Elliptical orbit. Period 686.70 minutes.

Four Modes: B; JL; L and S:

1. Mode-B: General Beacon 145.812; Engineering Beacon 145.985MHz. Uplink passband 435.423–435.573MHz equates with downlink 145.975–145.825MHz (inverting).
2. Mode-L: General beacon 435.651MHz. Uplink passband 1269.351–1269.641MHz equates with downlink 436.005–435.715MHz (inverting).
3. Mode-J: Uplink passband 144.423–144.473MHz equates to downlink 435.990–435.940MHz (inverting).
4. Mode-S: Beacon 2400.325MHz. Uplink passband 435.601–435.637MHz equates to downlink 2400.747–2400.711MHz (inverting).

New Satellites

Note: The following six satellites were all launched on 22 January 1990. Inclination 98.7°. Altitude 825km.

UoSAT-3 (UO-14): Cat. 20437
Mode-J Pacsat using 1200bps AFSK/9600bps FSK. Uplink: TBA. Downlink: 435.070MHz 1200bps AFSK/9600bps FSK.

Experiments to study Cosmic Particles and total radiation dosage are also carried.

UoSAT-4 (UO-15): Cat 20438
Downlink: 435.120MHz 9600bps FSK.

This spacecraft is similar to UO-14 in control, power supply, telemetry and command areas but is primarily a technology test mission, with sophisticated data processing and CCD camera systems, plus a solar-cell test-bed experiment.

Microsat PACSAT-OSCAR-16 (AO-16): Cat 20439
AMSAT-NA's Mode-J PACSAT. Using FO-12 communications format. Uplinks: 145.900; 145.920; 145.940; 145.960MHz Manchester Encoded FM. Downlink: 437.025MHz BPSK or 437.050MHz BPSK using Raised Cosine Modulation. A Mode-S Downlink is also present, on 2401.142MHz transmitting the same format as on 70cm when commanded on.

Microsat DO-17: Cat 20440
BRAMSAT's DOVE (Digital Orbiting Voice Encoding Satellite). Downlink: 145.825MHz NBFM. Educational spacecraft transmitting messages and telemetry as speech or as standard AX.25 packets at 1200bps. An additional downlink uses S-Band on 2401.220MHz.

Microsat WO-18: Cat 20441
Weber State College's WEBERSAT. A facility for video data collection from CCD Camera and transmission by packet radio techniques. Uplink: TBA. Downlink: 437.075MHz BPSK or 437.100MHz BPSK Raised Cosine Modulation. A range of other experiments also have telemetry on same frequency. Will also receive and retransmit ATV uplinked on 23cm and has PACSAT capability as well if required.

Microsat LO-19: Cat 20442
AMSAT-Argentina's LUSAT. A Mode-J PACSAT. Uplinks: 145.900; 145.880; 145.860; 145.840MHz Manchester Encoded 1200bps NBFM. Downlink: 437.150MHz BPSK (as per FO-12 format).

Secondary Payload: CW Beacon on 437.125MHz. Transmitting limited range of telemetry at 12wpm. Intended to bring satellite operations to Argentinian Amateurs who don't have packet capability.

For further details on any of these satellites see *Break-In* or contact ZL1MO with SASE for further technical information.

Other Satellites pending

RS-12/13
Similar to RS-10/11, this dual system will also be carried on a host spacecraft. It is ready for launch when the host is required to replace an existing spacecraft currently in service.

RS-14
Another Russian Amateur Satellite due to be carried aloft on a host, GEOS, a Russian Geological Survey Satellite. Due for launch in July 1990, RS-14 should carry a Mode-B transponder and a Digital system similar to RUDAK, designed and built by AMSAT-DL. Mode-B Uplink: 435.080–435.180MHz. Downlink: 145.950–145.850MHz (inverting). RUDAK-2 uplink: 435.100MHz 1200bps FSK or 435.150MHz 4800bps FSK. Downlink: 145.990MHz 1200bps PSK.

WARO
NZ Women Amateur Radio Operators

WARO was formed in 1961–62 by a small but keen group of YL transmitters and has steadily grown both in numbers and enthusiasm ever since.

For the annual subscription (constantly under review, currently $6.00 for New Zealand members) members receive four quarterly Bulletins containing items of interest to operators and friends, with special attention to YL activities.

Associate members—YLs who do not have a transmitting licence are welcome, as are YLs from overseas, many of whom are sponsored by ZL members.

Object

To promote and encourage interest in Amateur Radio amongst women.

Officers 1989–90

President: Carol Gaudin ZL2VQ

Vice-President: Ann McMaster ZL3VR

Secretary: Christine Armstrong ZL1BQW, PO Box 209, Kawerau.

Treasurer: Dawn Young ZL2AGX

Award Custodian: Vicki Shaw ZL1OC. P.O. Box 2088, Whakatane.

Contest Manager: Jeanne Gilchrist ZL2BOD

Sub-Editor to *Break-In*: Val Searle ZL3GW

YL Nets: These are held every Monday evening at 8.00 p.m. (9.00 p.m. during daylight saving time) on 3.700 MHz, except 5th Monday on 3.6 MHz. Newcomers welcome.

Digital Modes

by ALAN WALLACE ZL1AMV

Digital communication modes represent one of the fastest growing areas of interest in amateur radio, with the past decade seeing many developments. While there are other digital modes that radio amateurs are experimenting with, RTTY, AMTOR, and Packet Radio are the main digital modes on amateur radio.

RTTY

Baudot code is still the common denominator of RTTY modes, but it is far from standardized itself. The correct term is CCITT International Alphabet No. 2, and the main dialects of it go under the general names of Baudot (for mainly US derived machines). The differences between these codes is in the punctuation characters and would not be noticed between two operators unless they used punctuation such as "!", ":", "%". etc.

Baudot is sent at differing speeds in different areas. Most US operation is at 45.45 baud (a hangover from a speed limitation by the FCC of 60wpm for any coded operation), at 45 baud in Europe, while all operation in New Zealand is at 50 baud (after a collective decision to standardize to the commercial speed). Nowadays, computers have almost completely taken over from the mechanical teleprinter, so baud rate changes are no longer the problem they once were. This does not mean that there are no Creeds or Teletypes still operating—there are a number of these reliable beasts still clanking on in ZL.

ASCII is used to a small degree on amateur bands. The proliferation of personal computers in the ham shack, often with inbuilt communications facilities designed to work on telephone networks, has increased operation in this mode. A number of operators shift to ASCII to transmit longer files at a faster rate, and W1AW transmits the ARRL bulletins in ASCII. The speed is generally standardized at 110 baud, however faster rates, such as 200 and 300 baud, are used, with varying degrees of success.

AMTOR

One common problem with direct printing RTTY (such as Baudot and ASCII) is errors in reception. If there is any slight disturbance to the received signal, it is quite likely that an incorrect character will be printed. This is not a major problem in the average amateur conversation, as the rest of the sentence will usually fill in the gaps. However, on all but the best contacts, important details (e.g. frequencies), must be repeated a couple of times to ensure that the other station gets what you want to say. This form of operation may be satisfactory for hams but it is not satisfactory for commercial operation such as ship to shore teletype.

AMTOR can be thought of as a more advanced form of RTTY which includes automatic acknowledgement of each group of characters sent, or a request for repeat. This results in error-free communication (at the expense of speed, especially in poor conditions). The protocol is very specific so there is no variation in the transmission speed of 100 baud. As this mode requires more sophisticated equipment able to handle the handshaking functions and a relatively fast receive/transmit changeover in your radio, the number of operators is a little down on the simpler modes.

The main feature of AMTOR is that it uses the Moore code, which is made up of seven unit characters (bits), but utilizing a select few of the possible combinations, thus allowing a receiving station to tell if a received code is correct or not. AMTOR operation involves the transmitting station sending three characters, then waiting for a response from the receiving station. The response will either be "roger", "go ahead" or "no go" (or perhaps nothing at all if the path has faded out). The transmitting station then either repeats the last three characters, or sends the next three. This operation is a form of ARQ (& Automatic ReQuest), known as AMTOR Mode A.

By sending text in bursts of three characters, awaiting one character reply, then sending three more, AMTOR requires radio equipment which can change from transmit to receive in a very short time. On-air AMTOR has a characteristic fast "chirp-chirp" sound.

There is another version of AMTOR (Mode B) which also uses the Moore code (i.e. has the ability to detect errors), but is an FEC (Forward Error Correction) system, rather than an ARQ system. Instead of a transmit and wait acknowledgement system, Mode B simply transmits every character twice, three characters apart. This allows the receiving station two goes at getting it right. As a result, Mode B AMTOR is more reliable than RTTY, but not as reliable as Mode A AMTOR. Mode B, as it does not require acknowledge responses from the receiving station, is used for news broadcasts, and CQ calls. Mode A also is limited by the specified timing to short-path HF contacts due to the radio propagation time around the world, so Mode B is necessary for some contacts.

RTTY/AMTOR Mailboxes

There are a number of SELCAL/Mailbox stations operating, including ZL2HO and ZL1AMW which monitor 7045kHz in Baudot, and VK2AGE who monitors 7045kHz in AMTOR ARQ.

Packet Radio

RTTY is reliable at good signal strengths and AMTOR provides reliability at low signal levels, but while transfer is faster than many typing speeds, it is rather slow for large messages, and permits only conversation per "channel". Recent innovations such as selcal and mailbox systems have greatly improved the versatility of these modes, but they are still restricted by their speed, reliability, economy of spectrum, and limited character sets. Neither system permits the reliable transfer of full eight bit data.

Packet radio solves these problems with a sophisticated message format permitting the transfer of full eight bit data to specified receivers at high speed, along with error checking capabilities. Increased channel utilization and the potential for the worldwide linking of stations (i.e. networking) are just some of packet radio's favourable attributes.

Basically each "packet" is sent as a complete block with a unique eight bit pattern (called a flag) indicating its start and finish. The block consisting of the two flags and data between them is called a packet (or a frame if you want to get technical). Within this packet is the destination address of the packet, the source (i.e. sender's) address, control information on the type of packet being sent (control, acknowledgement, information), data (where applicable), and a CRC (Cyclical Redundancy Check) which enables the receiver to determine whether there are any errors in the received packet. The exact format of the packet is laid down by an agreed protocol. (A full explanation of packet radio can be found in recent editions of the *ARRL Handbook*, and other such publications.)

The first protocol widely used by amateurs was known as the VADCG V1 protocol. While this protocol facilitated early experimentation, it had a number of limitations. To overcome these limitations, a new protocol called AX.25 was developed. AX.25 is based on X.25, an international packet-switching protocol.

Packet radio requires the use of a computer to handle the protocol and the exchange of data. This may be done by either programming a personal computer, or by using a dedicated computer called a TNC (Terminal Node Controller) connected between a computer/terminal and the radio. The TNC approach leaves the operator's computer free to handle application activities.

Common Operating Frequencies

RTTY/AMTOR

ZL net frequencies:

80 metres	3545kHz
40 metres	7045kHz

International Operating Frequencies:

80 metres	3610–3640
40 metres	7040–7060
20 metres	14080–14100
10 metres	28080–28100

Packet Radio
ZL operating frequencies:
2 metres—most operation on 144.65MHz, see the FMTAG Bandplans for full details.

International Operating Frequencies:

40 metres	7030–7040
20 metres	14100–14150

Packet BBS Operation

There are a large number of packet radio Bulletin Board Stations operating in ZL, mostly with access on 2 metres. To use these stations, simply connect, and enter your command. The command "H" for help responds with a list of features of that BBS.

Facilities available on a BBS are very comprehensive, however the most commonly used commands are:

LM—"List Mine"—this will provide a list of message numbers, and subjects, for messages to you.

Rxxxx —"Read message number xxxx"—After listing your messages, to read one, note the message number, and enter a read command for that number.

KM —"Kill Mine"—Kill all messages addressed to me, that I have read. Note that you cannot kill a message until you have read it.

L—"List messages"—This lists all new messages and bulletins on the BBS since you last listed messages. Note that if this is your first time on a BBS, or you have not checked in for some time, this command will result in a very long reply.

S ZL1XYZ—"Send message to station callsign ZL1XYZ"—The BBS will then prompt you for a subject (one line of up to 60 characters), then the message content. End the message with either "/EX" or control "Z".

B—"Bye"—This logs you off the BBS, and it initiates a disconnect from you. In fact you can log off simply by disconnecting.

BBS forwarding

The packet BBS network in ZL is capable of forwarding a message throughout New Zealand, and to most locations overseas.

A map is included in the repeater section of *Call Book* showing the main centre BBSs. To send a message to a distant amateur, note the callsign of their local BBS, and use that as the message address. For example:

If you reside in Auckland, and have a message for an amateur in Christchurch, all that is required is for you to enter an @ in the send command to the appropriate BBS, e.g.:

S ZL3ABC @ ZL3AC—This will command the BBS network to forward your message to the ZL3AC BBS (In Christchurch). The forwarding is completely automatic, and often the message will pass through a number of BBS on the way.

Most BBS stations are operated by interested amateurs from their home, using their own computers, therefore new stations often appear, and some old stations go off the air. For this reason a current list of active BBS stations is difficult to maintain. Recently a number of Branches of NZART have set up BBS stations, using Club resources. By their nature these stations will be somewhat more permanent, and are marked ** on the map.

Forwarding mail overseas

To send mail overseas, you simply insert the destination BBS as usual. For example, to send a message to G3ABC at the G7ABC BBS, simply enter this into your local BBS as:

S G3ABC @ G7ABC

The local BBS will forward this to the current overseas gateway, and from there the overseas HF forwarding networks will carry the message.

Digipeaters

A number of "Level 3" digipeaters have been installed on hilltops. These consist of standard TNCs operating special software, providing a store and forward packet repeater.

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The most common software being operated currently is "TheNet", which provides a form of networking based on "Nodes". Each digipeater is regularly broadcasts a list of other digipeaters (nodes) it can hear, and that it has heard about from the next digipeater down the chain. This way all digipeaters in a network build up a list of all others, and the route to each other.

A user simply connects to his local digipeater, and enters the command "N", for nodes, and the digipeater will reply with the list of the nodes in the network. The user then issues a command to the digipeater to connect to the desired node, and the digipeater will automatically connect through all the required intermediate digipeaters to the destination. The user can then command the far end digipeater to connect to his destination home station.

Another type of digipeater software is called "Rose". This also provides network working, but in a very different way to "TheNet". Rose networks are based on a number scheme, using the local telephone STD codes. To use a Rose network you must know the callsign of the local digipeater, and the numeric code of the destination node. For example to work home station ZL1XYZ through a local digipeater callsign ZL1BQ-3, and destination node numeric code 400000, a user would issue this command:

C ZL1XYZ V ZL1BQ—3,400000

While the structure of this command is similar to "Level 2" home station digipeating, in fact the Rose software intercepts the path, and provides full store and forward repeating through the network.

Current Information

A regular weekly news broadcast on ZL digital mode happenings is broadcast on 7045kHz, Sunday mornings at 0930 hours (local time), first in Baudot, then repeated in AMTOR FEC. It is also available on the VHF packet network throughout the country. This provides updates on digipeater and BBS happenings, also RTTY and AMTOR mailbox and operating information.

OLD TIMERS CLUB

The objects of the Old Timers' Club (ZL) are set out in our Constitution adopted in 1954. They are as follows:

1. To recognise service to Amateur Radio;
2. To revive and maintain interests and good fellowship among the older members in the common cause.
3. To offer aid to Young Timers.

Full membership is available to any ZL amateur who has held an amateur licence for the last 25 years or more and is still an active amateur. In addition, Associate Membership is available to any ZL amateur who has attained the age of 60 years (and over) and has been an active amateur for 20 or more years. Voting privileges are not available to Associate Members.

No subscription or entrance fee is payable. However, a small donation is acceptable with the membership application to assist the Club's modest expenses, mainly postage and stationery, which are helped from time to time with other small donations.

Application for Membership forms may be obtained from a member of the Districts Representative Committee or from the National Secretary and evidence of eligibility which is to be submitted shall include:

1. Date of original licence;
2. Operator's Certificate number;
3. Original Callsign held and any others;
4. Present Callsign and address;
5. Full name;
6. Sufficient postage to cover postal charges;
7. All applications for membership must be proposed and seconded by two members of the OTC.

On acceptance a Certificate is issued to all Full and Associate Members. In addition, a further handsome Certificate of Merit is available on request to those who attain 50 years and 60 years of Amateur Service.

The Club is duly affiliated to the New Zealand Association of Radio Transmitters (Inc.).

All correspondence should be addressed to the National Secretary:

P. C. Anderson ZL1LR, 32 Gilmour Street, Waihi 2991.

If a reply is expected, please enclose a stamped, self addressed envelope.

Articles relating to all aspects of OTC or of vintage Radio for publication in the OTC section of Break-In are welcomed by, and should be addressed direct to our Scribe, Don Sutherland ZL2AJL, 23 Peakes Road, Wanganui.

Nets and Awards

National Nets are held every Sunday from 9.30am with the Secretary's official news at 10.00am. on the 40m band as follows:

7058±kHz (SSB, AM, CW) with news on this frequency
7120±kHz AM.

Should conditions on 40m be unsatisfactory, the Net Controller may decide that the Net will QSY to 80m,

3820kHz (SSB etc.)
3850kHz (AM)

Please check these frequencies if in doubt.

Office Bearers

Patron: D. Wilkinson ZL2AB

Grand Old Man: John Baxendale ZL1CD

General Secretary: P. C. Anderson ZL1LR

Net Controllers: J. A. Cheyne ZL2AQI
C. V. Shennan ZL2HS
T. R. Colquhoun ZL2ASP

Assistants: K. R. Hanlon ZL1PB
AM Phone—D. G. Alexander ZL2AWF

Districts Representative Committee (Main Centres):
H. L. Martin ZL1PX
T. R. Colquhoun ZL2ASP
L. C. Hunter ZL3BJ
S. G. Hill ZL4ID

and assistants (Other centres):
G. C. Rouse ZL1AQ
R. H. Hanley ZL2GU
E. W. Belcher ZL3QY
J. V. Colyer ZL4KE

OTC Column in *Break-In* Scribe: D. C. Sutherland ZL2AJL

Certificate Preparation: Anne Anderson ZL1TAF

AREC AMATEUR RADIO EMERGENCY CORPS

Formed in 1932 following the Napier Earthquake, the AREC objects are:

To provide emergency communications within New Zealand and to provide a body of trained radio operators who can be available at short notice.

There are 74 sections of AREC throughout New Zealand each with its own Section Leader responsible for organisation and training and each attached to a Branch of NZART from whence the members of the section are drawn.

Section Leaders liaise with emergency services such as Police, St John Ambulance, Red Cross, Civil Defence and Search and Rescue at the local level. Co-ordination at the national level with similar organizations and Government Agencies is done by the Officer Commanding who is appointed by the NZART Council.

AREC Section Leaders Net

A monthly net of all AREC Section Leaders is held on the third Monday of each month at 1930 hours. The Net is conducted by the OC AREC, ZL3EX, on 3900kHz Upper Sideband.

AREC Procedure

In most AREC search operations outside stations are quite often called upon to assist with relay work and these stations find difficulty in following AREC operating procedure. The following is the basic procedure for Telephony. CW procedure is covered in the AREC Manual.

1. Establishing contact; "ZL2ELA ZL2ELA ZL2ELA. This is ZL2ELB. How do you copy? Over."
2. ZL2ELA acknowledges as follows: "ZL2ELB this is ZL2ELA. Roger, your signals, Readability 5, Strength 8, go ahead. Over."
3. ZL2ELB replies: "Roger, I have message for you. Message begins, ZL2ELB 1, 121320. Addressed Brown. Text begins. Weather here fine. Signature Black. End of message. Over."
4. ZL2ELA replies: "Roger No. 1. I have no traffic for you. Over."
5. ZL2ELB replies: "Roger. No further traffic here. Over".
6. ZL2ELA replies: "Roger. ZL2ELB, this is ZL2ELA, out."

Note 1: The use of the signing procedures "over" and "out". When you sign "out" it is very desirable to check the channel before you call your next station. Signing out means you have finished your contact—final finals should be avoided.

Note 2: You will see callsigns have been omitted except for calling and signing. Callsigns should, however, be used (a) when other stations are in the operating net, (b) when conditions are poor and there could be some doubt. In these cases the operating station simply signs over as follows: "ZL2ELB this is ZL2ELA Over."

Note 3: Stem callsigns (eg ZL2EL) are personal issues to Section Leaders and MUST only be used by that Section Leader.

The use of correct operating procedures, whilst it may appear irksome and over-efficient to some, does save considerable time if every operator is aware of what to expect. We should aim at efficiency: efficiency saves time, and seconds are very valuable when a channel is busy. No one objects to the odd wisecrack or personal remark; these all help to relieve the tension, but these remarks must be kept to times when the channels are not busy. If a channel is busy, be brief and clear messages quickly and efficiently. Should an operator have an urgent message to clear, he should break in on the channel and say so—but he should use his discretion with the degree of urgency of his message—bearing in mind that out-station traffic must, for obvious reasons, have priority in the use of the channel.

Note: The procedure phrase "Break" is never to be used as a directive to another station to transmit. The correct signal for this purpose is the word "Over".

Emergency Procedures

Emergency and Distress Calling:

Where it is required to attract attention in cases of emergency or distress, there are certain Phone and CW calls that are internationally recognised. These should be employed only where absolutely necessary for safety of life or property.

Distress:

On CW send "SOS" (send this as a single signal); on Phone say "Mayday". These signals indicate that the sender is in grave and imminent danger and requests immediate assistance. This distress call has absolute priority over all other transmissions.

(This signal has absolute priority over all other signals. All stations that hear it must immediately cease any transmission capable of interfering with the distress traffic, and shall continue to listen on the frequency used for the distress call. The call is not to be addressed to a particular station, and acknowledgement of receipt shall not be given before the distress message, which follows, is sent.)

Urgency:

On CW send "XXX XXX XXX"—send each letter distinctly. On Phone say "PAN" (Pronounced "pahn") three times. These signals indicate that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft, vehicle, or some person on board or in sight. The urgency signal has priority over all other communications except distress.

Safety:

"TTT" or "SECURITE": spoken three times (pronounced "SAYCURITAY") indicating navigational or meteorological warning.

It is allowable in cases of extreme emergency to use any frequency or mode of transmission whatever, if the operator considers that he may thus obtain assistance more quickly—but this action should only be taken when normal methods are inadequate.

When using distress or urgency signals always announce callsign and location and if no contact is made, keep calling with the important parts of the information—you may be heard by some station which is unable to reply.

AREC Emergency Frequencies

AREC is permitted to operate on the following frequencies which are reserved for AREC use in emergencies:

1875–1900 kHz
3500
3900
7100
2m frequencies by local arrangement.

The general calling frequencies for station requiring assistance in emergency is 3900 kHz Upper Sideband and this frequency is monitored by AREC personnel during such mishaps as severe storms, power failures, earthquakes, etc. Once the initial contact has been made, transmission should be made only on 3.9 Mhz or 3.5 Mhz.

AREC Callsigns

The callsigns given in the list of AREC Section Leaders and Deputies on page 158 are the basic section callsigns. In an AREC Section operation or practice, the base callsign is to be a three-letter callsign ending "A".

The basic two-letter callsigns of the Section is allocated to the Section Leader on a personal basis and may not be used by any other person.

The three-letter callsigns of the Section first called upon to provide communications shall be used for all stations in the forward area, and shall be allocated by the Section Leader of that Section. In a mountain search, the callsign ending in "A" is to be allocated to the base station in control of the base to road-end operations (e.g. Local Police Station or Local SAR centre); the callsign ending "B" to the main road-end station; the one ending in "C" to the station controlling communications in the forward area, (i.e. the Field Search Headquarters); the remainder of the callsigns to other stations as required.

Where a station is required to operate as a relay for distant stations his basic section callsign plus the letter "X" should be used as the Relay Station callsign (eg ZL2ELX).

The Phonetic Code

The Phonetic Code should be used with considerable discretion. Its primary purpose is to obviate confusion between letters and figures which have similar sounds, e.g.: BCDEGPTV, AKJ, MN, QU, FS, TWO, THREE, FIVE, NINE.

The possibility of confusion increases greatly under adverse operating conditions such as adjacent channel interference, high level of acoustic and electrical background noise, poor audio quality (including inferior articulation), fading, etc. Under these conditions more frequent use of the phonetic code may be necessary. However, when there is a complete absence of interference of any kind and signals are perfectly readable, phonetics can be eliminated except for difficult place names, proper names, and unusual words. Regardless of the quality of the circuit phonetics should always be used for callsigns during the establishment of initial contact. It is important to memorise the code thoroughly and to avoid using substitute words.

Phonetic Alphabet

Some words are likely to be misunderstood when passed over radio telephone circuits, due to phonetic similarity. A number of phonetic alphabets have been introduced to overcome this. The following being the most generally accepted at the present time.

A	ALFA	AL fah
B	BRAVO	BRAH voh
C	CHARLIE	CHAR lee
D	DELTA	DELL tah
E	ECHO	ECK oh
F	FOXTROT	FOKS trot
G	GOLF	GOLF
H	HOTEL	hoh TELL
I	INDIA	IN dee ah
J	JULIET	JEW lee ETT
K	KILO	KEY loh
L	LIMA	LEE mah
M	MIKE	MIKE
N	NOVEMBER	no VEM ber
O	OSCAR	OSS cah
P	PAPA	pah PAH
Q	QUEBEC	Kwee BECK or Key BECK
R	ROMEO	ROW me oh
S	SIERRA	See AIR rah
T	TANGO	TANG go
U	UNIFORM	YOU nee form or OO nee form
V	VICTOR	VIK tor
W	WHISKEY	WISS key
X	X-RAY	ECKS ray
Y	YANKEE	YANG kee
Z	ZULU	ZOO loo

1 WUN	2 TOO	3 thuh-REE	4 FO-wer	5 FI-yiv
6 SIX	7 seVEN	8 AIT	9 NI-ner	0 ZERO

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JAMBOREE ON-THE-AIR

Jamboree on the Air

A window on the Scouting and Guiding world

New Zealand 1990 OFFICIAL PROJECT

The Jamboree on the Air (JOTA) is an annual international activity which enables Scouts and Guides living all over the world to exchange greetings by Amateur Radio. This enables them to find out at first hand what it is to be a member of the world-wide fellowship of Scouts and Guides. It gives them an understanding and appreciation of other ways of life and of Scouting and Guiding in other countries.

From a small beginning in 1958, over 300,000 Scouts and Guides now take part in JOTA from thousands of amateur stations. No world-wide activity involves more Scouts and Guides than JOTA, and it has now become the greatest annual event in the Scout, Guide and Amateur Radio calendars.

The simplest way for Scouts and Guides to join in is for them to visit an amateur radio station sometime during the JOTA period. At the station on the day, the amateur operator establishes a contact with another JOTA station, and then hands over the microphone for the Scouts or Guides to talk to those at the other station.

Many Districts have District Organizers to arrange local participation. Some Scout Groups and Guide Companies have close contact with local radio amateurs (eg, parents) and make use of their stations for their JOTA activities.

Often, an amateur can set up a station at a Scout or Guide Headquarters, or some other “interesting” or appropriate place.

Many JOTA stations are set up at camps, the radio activities being incorporated into the camping programme.

JOTA is co-ordinated by the World Scout Bureau in Geneva and is organized by the National Organizers in each Scouting country. The New Zealand National Organizer is Jim Parnell ZL2APE. He is assisted by Gael Pye ZL2SZ, who promotes JOTA for New Zealand Guiding. Many Scout Districts have their own District JOTA Organizer who arrange for the Scouts and Guides to visit amateur stations so they may take part in JOTA.

JOTA is always held during the 24 hours of the third full weekend in October of each year. This year, it will be held on 20 and 21 October. As this is **Labour Weekend,** there is no reason why JOTA stations should not also operate on Monday 23 October if a longer period for contacting countries on the other side of the International Date Line is desired.

JOTA this year has been registered as a Sesquicentennial activity.

AWARDS

Award Notes

When applying for an award, whether through NZART or through an overseas Society, courtesy demands that you observe the following: (1) PRINT your name, address and callsign; (2) Clearly state what award (and endorsements) you are applying for; (3) Supply checking sheet with callsigns, dates of QSOs, mode, etc.; (4) Enclose required funds (currency/IRC/stamps) as requested.

For NZART Awards

1. The usually accepted rules apply to all NZART awards.
2. NZART stresses the HONOUR SYSTEM. Awards applicants need NOT hold QSL cards for claimed contacts. It is sufficient to merely certify that the QSO was legitimately made. This no QSL rule applies ONLY to NZART sponsored awards.
3. Endorsements for mode/time/location etc., made at applicant's request.
4. Stamps or currency from any country accepted instead of IRC but cheques NOT desirable.
5. Post applications to Awards Manager ZL2GX, 152 Lytton Road, Gisborne, New Zealand.

★ APPLICATION FORMS suitable for most awards are available from Awards Manager (SASE please).

Cost of Awards

NB—Cost given for awards are those for ZL applicants. Overseas applicants pay $2.00 for each NZART award EXCEPT WAP ($3.00) and 5×5 ($3.00) or where reciprocal arrangements have been made. Airmail postage is $1.00 extra.

ENZART

A prestige award to honour NZART

1. In three parts—(A) Basic award requires 200 points with endorsements for 250, 300, 350 points. (B) Honour award requires 400 points with endorsements for each additional 50 points. (C) HONOUR PLAQUE for 500 points.
2. Points earned as follows by contacting an NZART member who is on the voting roll of the Branch concerned—Phone QSO, 1; CW QSO, 2; Club Station QSO, 2; YL op. QSO, 1; UHF, VHF QSO, 1; Mobile QSO, 1; AMSAT QSO, 1; Branch President QSO, 1.
3. It is essential to clearly determine that the operator contacted is a financial member of NZART and on the voting roll of the Branch concerned.
4. Contacts claimed with a Branch Station must be from a Clubroom or other permanent headquarters, or alternatively when the station is being operated in a contest, from an exhibition, or other activity of a similar kind. Contacts as a result of callsign "swapping" at a member's QTH are not eligible.
5. Contacts with mobiles are eligible only when the mobile station is within 30 miles of his Branch's Clubrooms or his own QTH. (Note rule 3 above.)
6. One station may be claimed in several categories—e.g. the Branch President can be claimed for both Phone and for CW as well as for Branch President—but EACH claimed must be for a separate contact, and the contacts must be not less than 24 hours apart.
7. Contacts must be "Phone to Phone" or "CW to CW".
8. "Club Net" contacts are not eligible until the net concludes, while contacts made in an organized "awards net" with MC etc., are not eligible.
9. Permanent changes of QTH by claimant are permitted and likewise contacts made during genuine temporary operation.
10. ZL applicants must be members of NZART and all applicants must certify that each contact made fulfils award requirements. No QSL card need be held or submitted but applications must be made on special Check List—cost 10 cents plus SASE (large). Contacts must date 1-11-76 or later.
11. Each certificate costs $1.00. Endorsements free but SASE required.
12. Applications to NZART Awards Manager, ZL2GX.

WAP—"Worked All Pacific"

Contacts required with 30 different "Oceania Countries".

Eligible countries ... Any Oceania country, i.e. eligible as Oceania or WAC. (See DXCC list.) Cost $2.00.

Five Band WAP

Contact any 30 eligible Pacific Countries (as count for Oceania or WAC), each on FIVE different bands making a total of 150. Send list of log extracts (QSLs not required to be held) to Awards Manager ... with $8.00. REWARD: Wooden Shield surmounted with NZART badge and suitably inscribed. (Extra overseas postage for AIRMAIL—$2.00.)

Antipodes Award

All round Achievement recognized as:

1. Technical
   - (a) Stations of claimant (receiver, transmitter, antenna) to be home built, to be completely of amateur design and construction which the operator has personally developed and constructed;
   - (b) Commercially constructed equipment or kitsets from any source are not eligible.
2. Operating

   Three QSOs to be made with stations (these stations NOT required to meet above requirements) in the general "antipodes continental area" of the claimant—(e.g. ZL to Europe).

   Applications to ZL2GX (NZART) with $1.00 with certification that rules have been observed. (Award suggested by ZL2AMJ.)

NZA—New Zealand Award

Available to all radio amateurs other than ZL.

Requirements:
35 contacts with ZL1.
plus 35 contacts with ZL2.
plus 20 contacts with ZL3.
plus 10 contacts with ZL4
plus 1 contact with ZL "territory"—either from N.Z. Antarctica, Chatham Islands, Kermadec Islands, or Campbell Island. This one contact may be substituted by 20 ordinary ZL contacts if desired.

This makes a minimum of 101 contacts which should be dated from December 8, 1945. (Cost $1.00).

NZC—New Zealand Counties

Basic award required contacts with 20 different New Zealand Counties. Endorsements for 40, 60, 80, 100 are made with a special certificate for 112. Map showing counties is depicted elsewhere, while checking sheet is available from NZART (see below).

1. Initial certificate with any or all endorsements to 100 costs $1.00.
2. Separate endorsements to 100, after issue of basic award, costs 20 cents for any group—or 1 IRC. Plus SASE.
3. Special Certificate for "NZC 112" costs $1.00
4. Checking sheets which MUST be used and which are returned to applicant for record purposes cost 20 cents (1 IRC).
5. NZC "224"—the "224" Shield was instituted to recognize very outstanding achievement—that of "double 112" with different stations contacted in the relevant counties for each

NZC 112. Current cost is $11.00. Applicants for NZC 224 must first hold TWO NZC 112 Awards.

6. The operator on a "County DXpedition" whether Mobile or Fixed Portable may claim that County for his own NZC credit.
7. The original "Counties List" will be maintained irrespective of deletions or additions. The criteria will be the actual area of operation which must be determined by the honour of the operator.
8. Overseas applicants—extra $2.00 for postage on "224" plaque.

"ZLA" Award

Contacts required with Auckland City, Wellington City, Christchurch City, Dunedin City, Antarctica ZL5, Campbell Island, Chatham Island, Kermadec Island. Applicants must send certified list to Awards Manager ZL2GX with $1.00 or stamps from country of applicant. Specially produced certificate.

WAZL—"Worked All New Zealand"

Contacts required for 45 different Branches of NZART—EXCEPT FOR OVERSEAS APPLICANTS (for whom only 35 are required). Special endorsement when WAZL completed within 12 month period. NB: Mobiles operating outside their own Branch Area must use the Branch Number of the area in which they are operating (for WAZL credit). Cost $1.00.

NZART Branches for WAZL—See Branch Directory on pages 8-13.

VHFCC—VHF Century Club

One hundred points required from QSOs with ZL stations on the following basis:

50 MHz band contacts count 1 point.
144 MHz band contacts count 3 points.
432 MHz band contacts count 6 points.
(Further bands may be added in the future).

The same station may be claimed once on any one band but may be claimed repeatedly on different bands.

Endorsement stickers available for 200, 300, 400, 500 points. (Cost $1.00).

WAD—A VHF Award

Contacts required on any VHF band (or mixture of VHF bands) with ZL1, ZL2, ZL3, ZL4—One contact per Call Area. Cost—$1.00. Endorsements for Satellite QSOs.

"5 × 5"—Five by Five

This Premier Award has been instituted to recognize the increasing interest in Five Band DX operation. The initial award requires that the same station be contacted on five bands repeated with five different DXCC countries. First endorsement after a further five has been contacted (total of ten) with the 20 endorsement requiring another ten and so on to 100. Certified list with full QSO data and fee of $2.00 which includes all endorsements. Certificate is outstanding and is overprinted in embossed gold. Contacts must date from 1945. Applications to ZL2GX.

NZLA—New Zealand Lakeside Award

1. For Basic Award, contacts are required with stations operating on the shores of TEN (10) freshwater lakes in New Zealand. Endorsements for each additional ten lakes up to 40; Honour Award for 50 lakes with further endorsement for each additional ten.
2. Stations must be located within ONE kilometre of the water or in a town on the lake shore.
3. Full rules are with the Check Sheets which MUST be used when applying for NZLA—these cost 20 cents plus SASE (large).
4. Basic Award costs $1.00, and large SASE for any endorsement; Honour Award is $1.00 and SASE for any endorsement.
5. Check Sheets from Awards Manager ZL2GX, to whom all applications must be directed.
6. Eligible contacts must date 1-5-76 or later.

NOTE: Check Sheets are returned to applicant and make up a complete record of lakes credited towards award. Basic work for this award was done for NZART by Mike Groth ZL1AHF.

CJC

Captain James Cook Award

To perpetuate the memory of this world famous navigator and seaman—in three classes: Basic "Sailor Class" requires contacts with—G in Yorkshire; FO8; ZL2; VK2; KH6 ... For "Officers Class"—"Sailor Class" contacts as well as ZL1, ZL3, ZL4, VK3, VK4, VK9 New Guinea, and any Antarctic station ... For "Command Class", as for "Officer Class" as well as any five of the following—VE2, VO, VR5, YJ8, FK8, CE8, KL7.

Certified list (confirmations not required) with $1.00 to ZL2GX.

Tiki Award

Work five different ZLs each on FIVE different bands dated post-war. Cost $1.00.

ZL1 Award

Basic Award requires contacts with 125 ZL1 stations dating post-war. Endorsements 175 and 250.

ZL2 Award

Basic Award requires contacts with 100 different ZL2 stations dating post-war. Endorsements for 150 and 200.

ZL3 Award

Basic Award requires contacts with 50 different ZL3 stations dating post-war. Endorsements for 75 and 100.

ZL4 Award

Basic Award requires contact with 25 different ZL4 stations dating post-war. Endorsements for 35 and 50.

Note: cost of ZL1/2/3/4 Certificates is $1.00 each with any endorsements. Further endorsements will cost 10 cents or 1 IRC UNLESS a new certificate is required instead of "sticker", in which case the cost is 35 cents. On issue, certificates will be endorsed for band/mode as requested and for any yearly period of time (January through December). Such endorsements are of course available to applicants at any time after the initial award has been made. ZL or ZM combination is OK. Applications with list to ZL2GX.

"ZL-72" Award

Overseas stations work 50 different ZL stations during 1972; ZL stations work 100 as follows: 35 ZL1, 35 ZL2, 20 ZL3, 10 ZL4 during 1972. Certified list with $1.00 to Awards Manager ZL2GX. "ZL-73" "ZL-74" "ZL-75" "ZL-76" "ZL-77" "ZL-78" "ZL-79" "ZL-80" "ZL-81" "ZL-82" "ZL-83" "ZL-84", etc.

Rules for ZL-72 except ZL and/or ZM are acceptable. Certificate will be rather unusual but appropriate. All applications to ZL2GX—(GCR) or 25 contacts on 160 with all districts represented.

This award ceased on 31 December 1989.

MIA

Minor Islands Award

For contacts with minor islands of the New Zealand coast—e.g. Kapiti Island, Portland Island, Great Barrier Island, Little Barrier Island, Waiheke Island, D'Urville Island, Rangitoto Island, Kawau Island, Motutapu Island, etc., from which FIVE contacts are required. Certified list with $1.00 to ZL2GX.

NB: So-called "Islands" in Auckland area which are connected to mainland by a causeway are not eligible.

IARU Region III Operating Awards

To publicise Region III

1. The award is available to licensed amateurs and SWLs.
2. Contacts made after April 5 1982 are eligible.
3. QSL cards NOT required. Send certified list of eligible contacts from Log Book.
4. Cost is $1.00 (surface) $2.00 (airmail) for postage charges only.

5. Eligible countries are those in Region III whose amateur societies are members of IARU Region III Association. These are: Australia, Bangladesh, Brunei, China (PRC), Fiji, French Polynesia (FO8 only), Hong Kong, India, Indonesia, Japan, Korea, Malaysia, New Zealand, Pakistan, Papua New Guinea, Philippines, Singapore, Solomon Islands, Sri Lanka, Thailand, Tonga, Vanuatu.

   PLUS:
   ONE Country credit from US Territories in the Pacific from Guam, Northern Marianas, American Samoa, Wake Island, Baker Howland Group, as presented by ARRL. ONE Country credit from Pitcairn Island (VR6), Chagos Archipelago (VQ9), represented by RSGB. Current total of available "countries" is 24. Requirements for Award as from January 1 1986: Basic, 7 areas; Silver Endorsement, 15 areas; Gold Endorsement, 20 areas. These to be reviewed as considered necessary by the custodian who would recommend appropriately to the Secretariat.

6. Awards may be endorsed for any mode or band.
7. Applications to NZART Awards Manager, 152 Lytton Road, Gisborne, New Zealand.

National Parks Award

1. For contacts made with stations operating WITHIN boundaries of a New Zealand National Park.
2. Basic award requires TWO contacts.
3. Usual NZART awards rules apply.
4. Endorsement: for each extra two contacts; for VHF Simplex; for VHF via repeater; for each amateur band; etc.
5. Duplicate Contacts (with SAME station) permitted ...
   ** on different amateur bands
   ** on different days
   ** from different Parks.
6. Eligible contacts to date from January 1 1988.
7. Applications with $2.00 to NZART Awards Manager.

New Zealand Women Amateur Radio Operators

WARO Award

General

Contacts may be any mode, any band or mixed, with applicants contacts all from the same QTH (except as in VHF Section), but contacts via repeaters, in WARO Nets or contests are not eligible. No QSLs required. Send full log details certified by one other licensed radio amateur to Custodian Vicki Shaw ZL1OC, PO Box 2088, Whakatane, New Zealand with sufficient postage for return of award.

HF Section

ZL and VK stations work 12 WARO members resident in New Zealand, DX stations work six. Contacts to date from 1 June 1969. Endorsement seals available to ZL and VK stations for each additional 12 contacts, DX stations six. Contacts with DX members of WARO qualify for endorsements but applications must contain at least three ZL contacts.

VHF Section

Ten VHF contacts with WARO members dating from 1 January 1979. WARO members and/or applicants may be home station, mobile or portable. Endorsements for each additional five.

SWL Section

ZL and VK stations list 20 contacts heard with WARO members, DX list ten, dating from 1 January 1979. List full log details with callsigns of both stations. Endorsements for each additional ten (five for DX stations).

NZWARO Century Award

1. Applications to contain full log details of contacts with 100 NZWARO members (DX members included) dating from 1 June 1987, and to be signed by one other licensed radio amateur.
2. Contacts may be any mode, any band or mixed, and from any QTH, but each YL claimed must be a financial member of NZWARO at the time of the contact and may be counted only once.
3. Contacts made via repeaters, in nets and in contests will qualify.
4. No QSLs required. Send list of full log details and $2.00 to Custodian, Vicki Shaw ZL1OC, PO Box 2088, Whakatane, New Zealand.

NZWARO Mountain Buttercup Award

1. For contacts with licensed NZWARO members, resident, visiting, mobile, etc, in the 60 towns named in the official list. WARO members working mobile, portable, etc may claim the relevant town for her own credit.
2. Contacts may be any mode, any band or mixed and made from any QTH, but each YL worked must be a financial member of NZWARO at the time of the contact and must be within a 25km radius of the centre of the town claimed.
3. Contacts made via repeaters, in nets and in contests will qualify and the same WARO members may be contacted in any number of towns.
4. Award dates from 1 January 1989. Send applications after 30 contacts containing full log details with the name of YL and town where worked, signed by one other radio amateur, together with $2.00 to Custodian Vicki Shaw ZL1OC, PO Box 2088, Whakatane, New Zealand. An official list of towns required to be worked available from the custodian upon receipt of stamped addressed envelope. No QSLs required. Stickers for each 5 up to 60.
5. Endorsement seals for each further ten contacts using the same list of towns. The same WARO members may be worked but each must be in a different town to where previously claimed. Please send SAE with endorsement applications.

North Island

1. Auckland
2. Dannevirke
3. Dargaville
4. Eketahuna
5. Featherston
6. Gisborne
7. Hamilton
8. Hawera
9. Helensville
10. Kaikohe
11. Kaitaia
12. Masterton
13. Matamata
14. Morrinsville
15. Napier
16. New Plymouth
17. Opotiki
18. Orewa
19. Otaki
20. Paihia
21. Palmerston North
22. Papakura
23. Putaruru
24. Rotorua
25. Taihape
26. Taumarunui
27. Taupo
28. Tauranga
29. Thames
30. Te Awamutu
31. Te Kuiti
32. Turangi
33. Upper Hutt
34. Waihi
35. Wairoa
36. Wanganui
37. Wellington
38. Wellsford
39. Whakatane
40. Whangarei

South Island

41. Alexandra
42. Ashburton
43. Balclutha
44. Blenheim
45. Christchurch
46. Cromwell
47. Dunedin
48. Gore
49. Greymouth
50. Hokitika
51. Invercargill
52. Kaikoura
53. Motueka
54. Nelson
55. Oamaru
56. Queenstown
57. Reefton
58. Timaru
59. Wanaka
60. Westport

Papakura Radio Club "21" Award

For contacts with 20 members of Papakura Radio Club PLUS ZL1VK dating from 1-1-77. Band/mode endorsements; certificates not numbered; cost $2.00. Apply to Miss C. Johnson, ZL1AJL, P.O. Box 397, Papakura.

Gisborne Award

Requirements: Contacts after January 1 1969, as follows:
Gisborne amateurs—ten different stations
ZL—four stations
Rest of world—two stations.

Cost: $1.00 apply to ZL2GX.

Manawatu Award

For overseas stations working FIVE stations who are members of Manawatu Branch 20. Certified list and $3.00 or five IRCs to ZL2AFT, 429 Albert Street, Palmerston North.

Horowhenua Award

For contacts in Branch 16 area—Levin, Otaki, Waikanae, Shannon, with bonus points for amateurs in various categories. Involved rules—for details write to: N.D. Broadbent ZL2ALB, R. D. 20, Ohau, Levin.

Reefton-Buller Award

Basic Award requires contact with any five Branch members; Merit Award requires, in addition to Basic, that ZLs contact—one Branch 62 Mobile, one XYL and the Club Station ZL3WP; while overseas stations contact any of those mentioned. Special merit for contacts made in 1973 between October 1 and December 31. No QSLs required. Send certified list with $1.00 to ZL2GX. List of members, etc., available from Branch 62 Secretary.

Christchurch Award

Requirements: Christchurch amateurs 25 different stations; rest of ZL—15 stations; VK—10 stations; rest of world—5 stations. Cost: ZLs 50 cents; others US$1.00 or equal. Applications to Awards Manager, Box 1733, Christchurch.

Bay of Plenty Awards

Overseas stations contact five stations in the area (Opotiki, Rotorua, Tauranga, Whakatane) while ZLs required ten, or five on VHF. Send certified list with $2.50 to ZL1BJP, 36 Western Road, Otumoetai, Tauranga.

Simplex contacts only.

Kapiti

Details March 1990 *Break-In* page 39. Enquiries to Awards Manager, ZL2AWI, PO Box 166, Paraparaumu.

Waitomo Award

Make 10 points with Branch 55 contacts as follows: VHF Simplex or CW, 2 points; VHF or UHF Repeater, 1 point; HF Phone, 1 point; HF CW, 2 points; VHF Satellite, 2 points; Club Station ZL1IZ, 2 points.

Log details and $2.00 to ZL1IZ, 65 King Street, Te Kuiti.

Wanganui Award

For contacts since 1-1-82 with permanent residents in the Wanganui area—one point; with Wanganui-based Mobile stations regardless of location—one point; with ZL2JA—two points. Overseas stations require three points; ZLs require five points. (Repeater contacts acceptable.)

QSO details with $1.00 to Award Manager, 1 Caversham Road, Wanganui.

Western Suburbs Radio Club Award

For contacts with any New Zealand amateur station. Use last letter of callsigns to make up words WESTERN SUBURBS RADIO CLUB. Branch 03 members may be used as bonus to replace any missing letters. Endorsement for band/mode. Certified list with 50 cents (overseas six IRCs or $1.00) to WSRC, P.O. Box 15-122, New Lynn, Auckland 7.

"Rhododendron Festival" Award

This award is to be held by the combined clubs of Taranaki on or about November each year to coincide with the local Rhododendron Festival. The Award Certificate will be one of a series of coloured, hand painted prints of named Rhododendron varieties by the well-known Taranaki artist, Janet Marshall.

The Award is on all bands, modes, etc, and is available to all amateurs and SWLs both in New Zealand and overseas.

Correspondence to Box 675 New Plymouth.

Overseas Awards

Note:

1. There are hundreds of awards which are publicised in amateur radio periodicals throughout the world each month! Many are listed in RSGB publication *Amateur Radio Awards* (priced in UK £1.20) and several publications of *DX Awards Guide* by Chuck Ellis, priced about $7.00 to $8.00 each! CHC Directory of Awards has been revised and published by NZART member Scott Douglas KB7SB. This is a very comprehensive publication selling for about US$12.50 (check with ZL2GX about these).
2. Most overseas awards can be certified by NZART Awards Manager so the QSLs don't have to be sent overseas BUT, always send a FULL checking list with all QSO data, etc., on which can be written the certification and which can be sent as the application. (ARRL Awards cannot be certified).
3. ALWAYS SEND SUFFICIENT RETURN POSTAGE for QSLs, etc. Print name and address on each sheet of paper used.

A-1 Operator Club

The basic aim of the A-1 Operator Club is to promote good operating in the amateur bands. To become a member one must be nominated by at least two operators who already belong. Every amateur should strive to merit nomination by following standard operating practice, by observing the rules of good Phone operation, and making his CW as clean and accurate as possible. An attractive certificate is awarded to each amateur who qualifies for membership. Note: This award is sponsored by the ARRL. Several ZL amateurs are members. Strive to merit nomination—you never know who may be listening. Similar awards are: TOPS; FOC; HSC.

WAC—Worked All Continents

Issued by IARU only through affiliated Societies. Applications from financial members of NZART only, must be made through the Awards Manager, accompanied by a checking sheet, QSL cards from the six continents, and return stamped envelope.

The following eight certificates are available: Basic (mixed mode), CW, Phone, SSTV, RTTY, FAX, Satellite and 5-band. In addition, the following endorsement stickers are available: QRP, 1.8 MHz, 3.5MHz, 50MHz, 144MHz, any higher frequency band and 6-band. Contacts made on 10/18/24 MHz or via satellite are void for the 5-band certificate and 6-band sticker.

QRP is defined as five watts OUTPUT (10W input) and QRP contacts must date on or after January 1 1985.

ZL applicants must be NZART members and enclose *Break-In* label with application.

There is NO charge.

French Awards

For information on DDFM, DUF, DTA, DTC, DPE, write to REF, 69 Bd de Bercy, Paris 12 (with 1 IRC) for full information bulletin. (This can be obtained on loan from Awards Manager ZL2GX.)

(Applicants for above can be certified by Awards Manager.)

CQ Magazine Awards

Application forms for CQ Awards available from ZL2GX—for WPX, SSB DX, CW DX, WAZ.

RSGB Awards

For WBC, BCRTA, CDX, etc—SASE to ZL2GX.

ARRL Awards

WAS—Worked All States

Obtain the rules and application forms for WAS and 5BWAS by sending a business-size SAE and a few IRC to the ARRL Headquarters, 225 Main Street, Newington, CT 06111, USA.

DXCC—DX Century Club

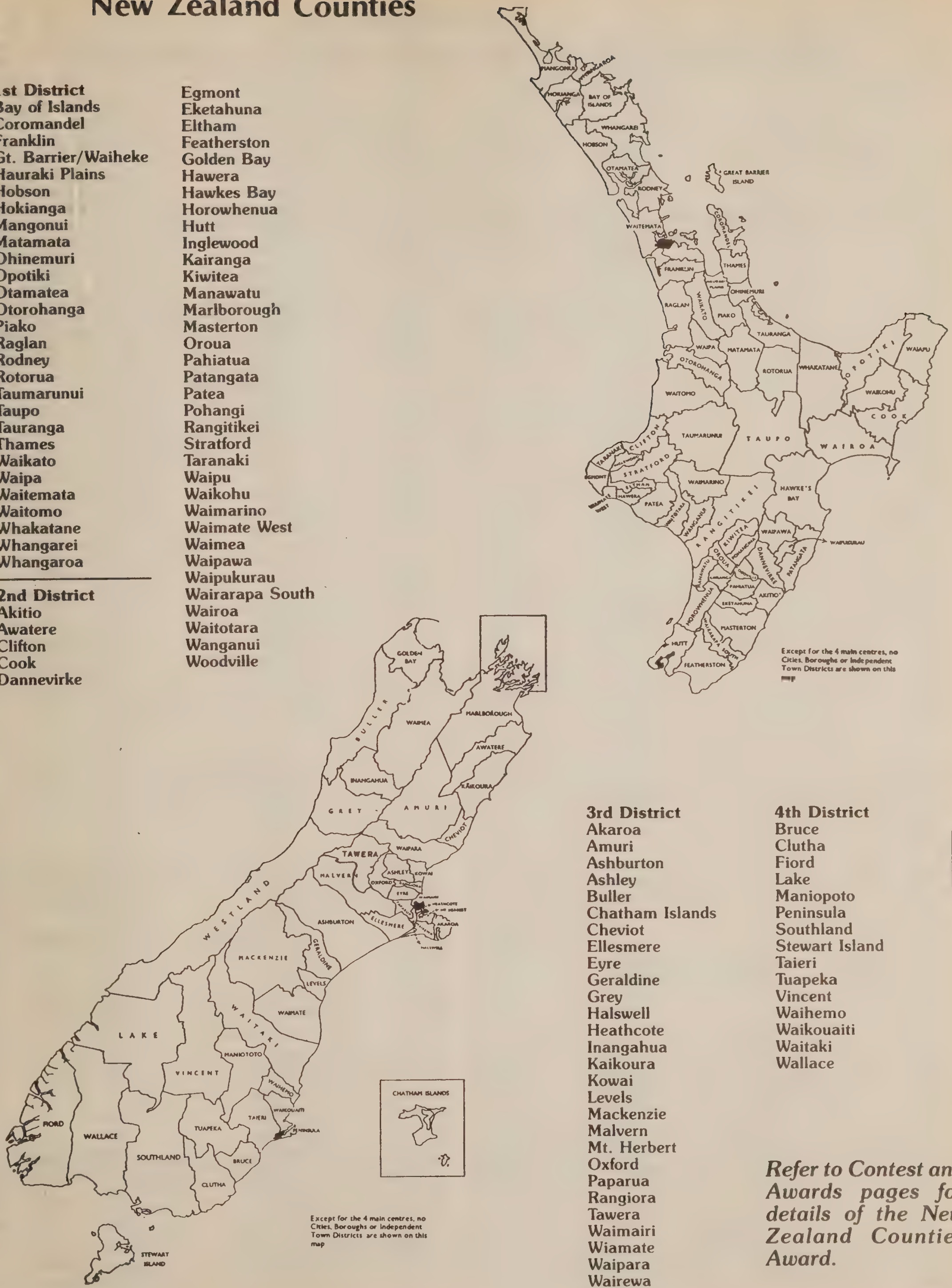
*See "Countries List" in this Call Book.

Many endorsements etc. available—full reprint of rules (4 A4 sheets) from Awards Manager for $1.00.

New Zealand Counties

1st District
Bay of Islands
Coromandel
Franklin
Gt. Barrier/Waiheke
Hauraki Plains
Hobson
Hokianga
Mangonui
Matamata
Ohinemuri
Opotiki
Otamatea
Otorohanga
Piako
Raglan
Rodney
Rotorua
Taumarunui
Taupo
Tauranga
Thames
Waikato
Waipa
Waitemata
Waitomo
Whakatane
Whangarei
Whangaroa

2nd District
Akitio
Awatere
Clifton
Cook
Dannevirke
Egmont
Eketahuna
Eltham
Featherston
Golden Bay
Hawera
Hawkes Bay
Horowhenua
Hutt
Inglewood
Kairanga
Kiwitea
Manawatu
Marlborough
Masterton
Oroua
Pahiatua
Patangata
Patea
Pohangi
Rangitikei
Stratford
Taranaki
Waipu
Waikohu
Waimarino
Waimate West
Waimea
Waipawa
Waipukurau
Wairarapa South
Wairoa
Waitotara
Wanganui
Woodville



Except for the 4 main centres, no Cities, Boroughs or Independent Town Districts are shown on this map

Except for the 4 main centres, no Cities, Boroughs or Independent Town Districts are shown on this map

3rd District
Akaroa
Amuri
Ashburton
Ashley
Buller
Chatham Islands
Cheviot
Ellesmere
Eyre
Geraldine
Grey
Halswell
Heathcote
Inangahua
Kaikoura
Kowai
Levels
Mackenzie
Malvern
Mt. Herbert
Oxford
Paparua
Rangiora
Tawera
Waimairi
Wiamate
Waipara
Wairewa
Westland

4th District
Bruce
Clutha
Fiord
Lake
Maniopoto
Peninsula
Southland
Stewart Island
Taieri
Tuapeka
Vincent
Waihemo
Waikouaiti
Waitaki
Wallace

Refer to Contest and Awards pages for details of the New Zealand Counties Award.

DXCC Countries List

Current Countries Total 324—Revised 1990—Reproduced courtesy ARRL.

PREFIX	COUNTRY	Continent	ZONE	
			ITU	CQ
A2	Botswana	AF	57	38
A3	Tonga	OC	62	32
A4	Oman	AS	39	21
A5	Bhutan	AS	41	22
A6	United Arab Emirates	AS	39	21
A7	Qatar	AS	39	21
A9	Bahrain	AS	39	21
AP-AS	Pakistan	AS	41	21
BV	Taiwan	AS	44	24
BY, BT	China	AS	(A)	23,24
C2	Nauru	OC	65	31
C3	Andorra	EU	27	14
C5	The Gambia	AF	46	35
C6	Bahamas	NA	11	08
C8-C9	Mozambique	AF	53	37
CA-CE	Chile	SA	14, 16	12
CE9/KC4[33]	Antarctica	AN	(B)	(C)
CE0	Easter Is.	SA	63	12
CE0	San Felix	SA	14	12
CE0	Juan Fernandex	SA	14	12
CM, CO	Cuba	NA	11	08
CN	Morrocco	AF	37	33
CP	Bolivia	SA	12, 14	10
CT	Portugal	EU	37	14
CT3	Madeira Is.	AF	36	14
CU, CT2	Azores	EU	36	33
CV-CX	Uruguay	SA	14	13
CY0	Sable Island	NA	09	05
CY9	St. Paul Island	NA	09	05
D2–3	Angola	AF	52	36
D4	Cape Verde	AF	46	35
D6[26]	Comoros	AF	53	39
DA-DL[2]	Federal Republic of Germany	EU	28	14
DU-DZ	Philippines	OC	50	27
EA-EH	Spain	EU	37	14
EA6-EH6	Balearic Is.	EU	37	14
EA8-EH8	Canary Is.	AF	36	33
EA9-EH9	Ceuta and Melilla	AF	37	33
EI-EJ	Ireland	EU	27	14
EL	Liberia	AF	46	35
EP-EQ	Iran	AS	40	21
ET	Ethiopa	AF	48	37
F	France	EU	27	14
FT8W	Crozet	AF	68	39
FT8X	Kerguelen Is.	AF	68	39
FT8Z	Amsterdam & St. Paul Is.	AF	68	39
FG	Guadeloupe	NA	11	08
FJ, FS[1]	Saint Martin	NA	11	08
FH[26]	Mayotte	AF	53	39
FK	New Caledenia	OC	56	32
FM	Martinique	NA	11	08
FO	Clipperton Is.	NA	10	07
FO	French Polynesia	OC	63	32
FP	St. Pierre & Miquelon	NA	09	05
FR/G[4]	Glorioso Is.	AF	53	39
FR/J, E[4]	Juan de Nova, Europe	AF	53	39
FR	Reunion	AF	53	39
FR/T	Tromelin	AF	53	39
FW	Wallis & Futuna Is.	OC	62	32
FY	French Guiana	SA	12	09
G	England	EU	27	14
GD	Isle of Man	EU	27	14
GI	Northern Ireland	EU	27	14
GJ	Jersey	EU	27	14
GM	Scotland	EU	27	14
GU	Guernsey & Dep.	EU	27	14
GW	Wales	EU	27	14
H4	Solomon Is	OC	51	28
HA, HG	Hungary	EU	28	15
HB	Switzerland	EU	28	14
HB0	Liechenstein	EU	28	14
HC-HD	Ecuador	SA	12	10
HC8-HD8	Galapagos Is.	SA	12	10
HH	Haiti	NA	11	08
HI	Dominican Republic	NA	11	08
HJ-HK	Colombia	SA	12	09
HK0	Malpelo Is.	SA	12	09
HK0	San Andreas & Providencia	NA	11	07
HL	Korea	AS	44	25
HO-HP	Panama	NA	11	07
HQ-HR	Honduras	NA	11	07
HS	Thailand	AS	49	26
HV	Vatican	EU	28	15
HZ	Saudi Arabia	AS	39	21
I	Italy	EU	28	15
, IS0,IM0	Sardinia	EU	28	15
	Abu Ali, Jabal at Tair	AS	39	21
J2	Djibouti	AF	48	37
J3	Grenada	NA	11	08
J5	Guinea-Bissau	AF	46	35
J6	St. Lucia	NA	11	08
J7	Dominica	NA	11	08
J8	St. Vincent & Dep.	NA	11	08
JA-JS	Japan	AS	45	25
JD1[5]	Minami Torishima	OC	45	27
JD1[6]	Ogasawara	AS	45	27
JT-JV	Mongolia	AS	32, 33	23
JW	Svalbard	EU	18	40
JX	Jan Mayen	EU	18	40
JY	Jordan	AS	39	20
K, W, N, AA-AK	United States of America	NA	6, 7, 8	3, 4, 5
KC6[28] (E. Caroline Is)	Micronesia	OC	65	27
KC6[29] (W. Caroline Is).	Belau	OC	64	27
KG4	Guantanamo Bay	NA	11	08
KH1	Baker, Howland Is.	OC	61, 62	31
KH2	Guam	OC	64	27
KH3	Johnston Is.	OC	61	31
KH4	Midway Is.	OC	61	31
KH5	Palmyra, Jarvis Is.	OC	61	31
KH5	Kingman Reef	OC	61	31
KH6	Hawaiian Is.	OC	61	31
KH7	Kure is.	OC	61	31
KH8	American Samoa	OC	62	32
KH9	Wake Is.	OC	65	31
KH0	Mariana Is.	OC	64	27
KL7	Alaska	NA	1, 2	1
KP1	Navassa Is.	NA	11	08
KP2	Virgin Is.	NA	11	08
KP4	Puerto Rico	NA	11	08
KP5, KP5[27]	Desecheo Is.	NA	11	08
KX6	Marshall Is.	OC	65	31
LA-LN	Norway	EU	18	14

PREFIX	COUNTRY	Con-ti-nent	ZONE	
			ITU	CQ
LO-LW	Argentina	SA	14, 16	13
LX	Luxembourg	EU	27	14
LZ	Bulgaria	EU	28	20
OA-OC	Peru	SA	12	10
OD	Lebanon	AS	39	20
OE	Austria	EU	28	15
OF-01	Finland	EU	18	15
OH0	Aland Is.	EU	18	15
OJ0	Market Reef	EU	18	15
OK-OM	Czechoslovakia	EU	28	15
ON-OT	Belgium	EU	27	14
OX	Greenland	NA	5, 75	40
OY	Faroe Is.	EU	18	14
OZ	Denmark	EU	18	14
P2[7]	Papua New Guinea	OC	51	28
P4[31]	Aruba	SA	11	09
PA-PI	Netherlands	EU	27	14
PJ2, 4, 9	Bonaire, Curacao (Neth Antilles)	SA	11	09
PJ5, 6, 7, 8	St. Maarten, Saba St. Eustatius	NA	11	08
PP-PY	Brazil	SA	(D)	11
PP0-PY0	Fernando de Noronha	SA	13	11
PP0-PY0	St Peters & St Paul Rocks	SA	13	11
PP0-PY0	Trinidad & Martin Vaz Is.	SA	15	11
PZ	Suriname	SA	12	9
S2	Bangladesh	AS	41	22
S7	Sayechelles	AF	53	39
S9	Sao Tome & Principe	AF	47	36
S0[1,32]	Western Sahara	AF	46	33
SA-SM	Sweden	EU	18	14
SN-SR	Poland	EU	28	15
ST	Sudan	AF	48	34
ST0	Southern Sudan	AF	48	34
SU	Egypt	AF	38	44
SV-SZ	Greece	EU	28	20
SV5	Dodecanese	EU	28	20
SV9	Crete	EU	28	20
SV/A	Mount Athos	EU	28	20
T2[16]	Tuvalu	OC	65	31
T3	W. Kiribati (Gilbert & Ocn Is.)	OC	65	31
T31	C. Kirbati (Brit. Phoenix Is.)	OC	62	31
T32	East Kirbati (Line Is.)	OC	61, 63	31
T33	Banaba Island	OC	65	31
T5	Somalia	AF	48	37
T7	San Marino	EU	28	15
TA-TC	Turkey	EU/AS	39	20
TF	Iceland	EU	17	40
TG, TD	Guatemala	NA	11	07
TI, TE	Costa Rica	NA	11	07
TI9	Cocos Is.	NA	11	07
TJ	Cameroon	AF	47	36
TK	Corsica	EU	28	15
TL[8]	Central African Republic	AF	47	36
TN[9]	Congo	AF	52	36
TR[10]	Gabon	AF	52	36
TT[11]	Chad	AF	47	36
TU[12]	Ivory Coast	AF	46	35
TY[13]	Benin	AF	46	35
TZ[14]	Mali	AF	46	35
UA1,3,4,6	European Russian RSFSR	EU	(E)	16
UA1	Franz Josef Land	EU	75	40
UA2	Kaliningrad	EU	29	15
UA9, 0	Asiatic RSFSR	AS	(F)	(G)
UB, UT, UY	Ukraine	EU	29	16
UC	Byelorussia	EU	29	16
UD	Azerbaijan	AS	29	21
UF	Georgia	AS	29	21
UG	Armenia	AS	29	21
UH	Turkmenistan	AS	30	17
UI	Uzbekistan	AS	30	17
UJ	Tadzhikistan	AS	30	17
UL	Kazakhstan	AS	29-31	17
UM	Kirghizia	AS	30-31	17
UO	Moldavia	EU	29	16
UP	Lithuania	EU	29	15
UQ	Latvia	EU	29	15
UR	Estonia	EU	29	15
V2	Antigua Barbuda	NA	11	08
V3	Belize	NA	11	07
V4[15]	St. Christopher & Nevis	NA	11	08
V8	Brunei	OC	54	28
VE, VO, VY	Canada	NA	(H)	1-5
VK	Australia	OC	(I)	29, 30
VK	Lord Howe Is.	OC	60	30
VK9	Willis Is.	OC	60	30
VK9	Christmas Is.	OC	54	29
VK9	Cocos-Keeling Is.	OC	54	29
VK9	Mellish Reef	OC	56	30
VK9	Norfolk Is.	OC	60	32
VK0	Heard Is.	AF	68	39
VK0	Macquarie Is.	OC	60	30
VP2E[15]	Anguila	NA	11	08
VP2M[15]	Montserrat	NA	11	08
VP2V[15]	British Virgin Is.	NA	11	08
VP5	Turks & Caicos Is.	NA	11	08
VP8	Falkland Is.	SA	16	13
VP8, LU	South Georgia Is.	SA	73	13
VP8, LU	South Orkney Is.	SA	73	13
VP8, LU	South Sandwich Is.	SA	73	13
VP8,CE9,HF0,LU,4K1	South Shetland Is.	SA	73	13
VP9	Bermuda	NA	11	05
VQ9	Chagos	AF	41	39
VR6	Pitcairn Is.	OC	63	32
VS6	Hong Kong	AS	44	24
VU	India	As	41	22
VU	Andaman & Nicobar Is.	AS	49	26
VU	Laccadive Is.	AS	41	22
XA-XI	Mexico	NA	10	06
XA4-XI4	Revilla Gigedo	NA	10	06
XT[17]	Burkina Faso	AF	46	35
XU	Kampuchea	AS	49	26
XX9	Macao	AS	44	24
XW	Laos	AS	49	26
XY-XZ	Burma	AS	49	26
Y2-9[2]	German Democratic Republic	EU	28	14
YA	Afghanistan	AS	40	21
YB-YH[21]	Indonesia	OC	51, 54	28
YI	Iraq	AS	39	21
YJ	Vanuatu	OC	56	32
YK	Syria	AS	39	20
YN	Nicaragua	NA	11	07
YO-YR	Romania	EU	28	20
YS	El Salvador	NA	11	07
YT-YU, YZ	Yugoslavia	EU	28	15
YV-YY	Venezuela	SA	12	09
VY0	Aves Is.	NA	11	08
Z2	Zimbabwe	AF	53	38
ZA	Albania	EU	28	15
ZB2	Gibraltar	EU	37	14
ZC4	Cyprus (UK Sov. Base Areas)	AS	39	20
ZD7	St. Helen	AF	66	36

PREFIX	COUNTRY	Con-ti-nent	ZONE	
			ITU	CQ
ZD8	Ascension Is.	AF	66	36
ZD9	Tristan de Cunha & Gough Is.	AF	66	38
ZF	Cayman Is.	NA	11	08
ZK1	South Cook Is.	OC	62	32
ZK1	North Cook Is.	OC	62	32
ZK2	Niue	OC	62	32
ZK3	Tokelaus	OC	62	31
ZL-ZM	New Zealand	OC	60	32
ZL7	Chatham Is.	OC	60	32
ZL8	Kermadec Is.	OC	60	32
ZL9	Auckland & Campbell is.	OC	60	32
ZP	Paraquay	SA	14	11
ZR-ZU	South Africa	AF	57	38
ZR2-ZU2	Prince Edward & Marion Is.	AF	57	38
ZR3-ZU3	S.W. Africa (Namibia)	AF	57	38
ZS9[32]	Walvis Bay	AF	57	38
1A0[1]	Sovereign Mil. Order of Malta	EU	28	15
1S[1]	Spratly Is.	AS	50	26
3A	Monaco	EU	27	14
3B6, 7	Agelega & St. Brandon	AF	53	39
3B8	Mauritius	AF	53	39
3B9	Rodriguez I	AF	53	39
3C	Equatorial Guinea	AF	47	36
3C0	Pagalu Is.	AF	52	36
3D2	Conway Reef	OC	56	32
3D2	Fiji	OC	56	32
3D2	Rotuma Island	OC	56	32
3DA	Swaziland	AF	57	38
3V	Tunisia	AF	37	33
3W, XV	Vietnam	AS	49	26
3X	Guinea	AF	46	35
3Y	Bouvet	AF	67	38
3Y	Peter I.	AN	72	12
4J1	Malyj Vysotskij Island	EU	29	16
4P-4S	Sri Lanka	AS	41	22
4U	ITU Geneva	EU	28	14
4U	Headquarters, United Nations	NA	08	05
4W	Yemen	AS	39	21
4X, 4Z	Israel	AS	39	20
5A	Libya	AF	38	34
5B	Cyprus	AS	39	20
5H-5I	Tanzania	AF	53	37
5N-5O	Nigeria	AF	46	35
5R-5S	Madagascar	AF	53	39
5T[18]	Mauritania	AF	46	35
5U[19]	Niger	AF	46	35
5V	Togo	AF	46	35
5W	Western Samoa	OC	62	32
5X	Uganda	AF	48	37
5Y-5Z	Kenya	AF	48	37
6V-6W[20]	Senegal	AF	46	35
6Y	Jamaica	NA	11	08
7O	Peoples' Dem. Rep. of Yemen	AS	39	21
7P	Lesotho	AF	57	38
7Q	Malawi	AF	53	37
7T-7Y	Algeria	AF	37	33
8P	Barbados	NA	11	08
8Q	Maldive Is.	AS/AF	41	22
8R	Guyana	SA	12	09
9G[22]	Ghana	AF	46	35
9H	Malta	EU	28	15
9I-9J	Zambia	AF	53	36
9K	Kuwait	AS	39	21
9L	Sierra Leone	AF	46	35
9M2, 4[23]	West Malaysia	AS	54	28
9M6, 8[23]	East Malaysia	OC	54	28
9N	Nepal	AS	42	22
9Q-9T	Zaire	AF	52	36
9U[24]	Burundi	AF	52	36
9V[25]	Singapore	AS	54	28
9X[24]	Rwanda	AF	52	36
9Y-9Z	Trinidad & Tobago	SA	11	09

CONTINENT

AF = AFRICA
AN = ANTARCTICA
AS = ASIA
EU = EUROPE
NA = NORTH AMERICA
OC = OCEANIA
SA = SOUTH AMERICA

ZONE NOTES

(A) 33, 42, 43, 44
(B) 67, 69-74
(C) 12, 13, 29, 30, 32, 38, 39
(D) 12, 13, 15
(E) 19, 20, 29, 30
(F) 20-26, 30, 35, 75
(G) 16, 17, 18, 19, 23
(H) 2, 3, 4, 9, 75
(I) 55, 58, 59

Footnotes

1. Unofficial Prefix.
2. (DA-DL) Only contacts made September 17, 1973,, and after, will count for this country.
3. (Y2-9)Only contacts made September 17, 1973, and after will count for this country.
4. (FR) Only contacts made June 25, 1960, and after, will count for this country.
5. (JD, KA1) Formerly Marcus Island.
6. (JD, KA1,) Formerly bonin and Volcano Islands.
7. (P2) Only contacts made September 16, 1975, and after, will count for this country.
8. (TL) Only contacts made August 13, 1960, and after will, count to this country.
9. (TN) Only contacts made August 15, 1960, and after, will count for this country.
10. (TR) Only contacts made August 17, 1960, and after, will count for this country.
11. (TT) Only contacts made August 7, 1960, and after, will count for this country.
12. (TU) Only contacts made August 7, 1960, and after, will count for this country.
13. (TY) Only contacts made August 1, 1960, and after will count for this country.
14. (TZ) Only contacts made June 20, 1960 and after, will count for this country.
15. (VP2) For DXCC credits on QSOs made May 31, 1958 and before, see page 97, June 1958 *QST*.
16. (T2, VR8) Only contacts made January 1, 1976, and after, will count for this country.
17. (XT) Only contacts made August 5, 1960, and after, will count for this country.
18. (5T) Only contacts made June 20, 1960, and after, will count for this country.
19. (5U) Only contacts made August 3, 1960, and after, will count for this country.
20. (6W) Only contacts made June 20, 1960, and after, will count for this country.
21. (8F, YB) Only contacts made May 1, 1963, and after, will count for this country.
22. (9G) Only contacts made March 5, 1957, and after, will count for this country.
23. (9M2, 4, 6, 8) Only contacts made September 16, 1963, and after, will count for these countries.
24. (9U, 9X) Only contacts made July 1, 1962, and after will count for these countries.

25. (9V) Contacts made between September 16, 1963, to August 8, 1965 count for West Malaysia.
26. (D6, FH8) Only contacts made July 5, 1975, and after, count for this country.
27. (KP5, KP4) Only contacts made March 1, 1979, and after, count for this country.
28. (KC6) Includes Yap Islands January 1, 1981 and after.
29. (KC6) Includes Yap Islands December 31 1980 and before.
30. (ZC4) Only contacts made August 16, 1960 and after count for this country.
31. (P4) Only contacts made January 1, 1986 and after count for this country.
32. (S0) Contacts with Rio de Oro (Spanish Sahara), EA9, also count for this country..
33. Also AT0, DP0, FT8Y, LU, OR4, VK0, VP8, Y8, ZL5, ZS1, ZX0, 3Y, 4K1, 8J1, etc. QSL via country under whose auspices the particular station is operating. The availability of a third-party traffic agreement and a QSL Bureau applies to the country under whose auspices the particular station is operating.

Deleted Countries

Deleted Countries Total: 51

Credit for any of these countries can be given if the date of contact with the country in question agrees with the date(s) shown in the corresponding footnote.

PREFIX	COUNTRY	Continent	ZONE	
			ITU	CQ
AC3[1,2]	Sikkim	AS	41	22
AC4[1,3]	Tibet	AS	41	23
C9[4]	Manchuria	AS	33	24
CN2[5]	Tangier	AF	37	33
CR8[6]	Damao, Diu	AS	41	22
CR8[6]	Goa	AS	41	22
CR8, CR10[7]	Portuguese Timor	OC	54	28
DA-DM[8]	Germany	EU	28	14
EA9[9]	Ifni	AF	37	33
ET2[10]	Eritrea	AF	48	37
FF[11]	French West Africa	AF	46	35
FH, FB8[12]	Comoros	AF	53	39
FI8[13]	French Indo-China	AS	49	26
FN8[14]	French India	AS	41	22
FQ8[15]	French Equatorial Africa	AF	47, 52	36
HK0[16]	Bajo Nuevo	NA	11	08
HK0, KP3, KS4[16]	Serrana Bank and Roncador Cay	NA	11	07
I1[17]	Trieste	EU	28	15
I5[18]	Italian Somaliland	AF	48	37
JD1/7J1[19]	Okino Tori-shima	AS	45	27
JZ0[20]	Netherlands New Guinea	OC	51	28
KR6, 8, JR6, KA6[21]	(Ryukyu Islands) Okinawa	AS	45	25
KS4[22]	Swan Islands	NA	11	07
KZ5[23]	Canal Zone	NA	11	07
P2, VK9[24]	Papua Territory	OC	51	28
P2, VK9[24]	Territorial New Guinea	OC	51	28
PK1, 2, 3[25]	Java	OC	54	28
PK4[25]	Sumatra	OC	54	28
PK5[25]	Netherlands Borneo	OC	54	28
PK6[25]	Celebe & Molucca Is.	OC	54	28
UN1[26]	Karelo-Finnish Republic	EU	19	16
VO[27]	Newfoundland, Labrador	NA	09	02, 05
VQ1, 5H1[28]	Zanzibar	AF	53	37
VQ6[29]	British Somaliland	AF	48	37
VQ9[30]	Aldabra	AF	53	39
VQ9[30]	Desroches	AF	53	39
VQ9[30]	Farquhar	AF	53	39
VS2, 9M2[31]	Malaya	AS	54	28
VS4[31]	Sarawak	OC	54	28
VS9H[32]	Kuria Muria Is.	AS	39	21
ZC5[31]	British North Borneo	OC	54	28
ZC6, 4X1[33]	Palestine	AS	39	20
ZD4[34]	Gold Coast, Togoland	AF	46	35
1M[1,35]	Minerva Reef	OC	62	32
7O/VS9K[36]	Kamaran Is.	AS	39	21
8Z4[37]	Saudi Arabia/Iraq Neutral Zone	AS	39	21
8Z5, 9K3[38]	Kuwait/Saudi Arabia Neutral Zone	AS	39	21
9S4[39]	Saar	EU	28	14
9U5[40]	Ruanda-Urindi	AF	52	36
[41]	Blenheim Reef	AF	41	39
[42]	Geyser Reef	AF	53	39

1. Unofficial prefix.
2. (AC3) Only contacts made 30 April 1975 and before count for this country. Contacts made 1 May 1975 and after count as India (VU).
3. (AC4) Only contacts made 30 May 1974 and before count for this country. Contacts made 31 May 1974 and after count as China (BY).
4. (C9) Only contacts made 15 September 1963 and before count for this country. Contacts made 16 September 1963 and after count as China (BY).
5. (CN2) Only contacts made 30 June 1960 and before count for this country. Contacts made 1 July 1960 and after count as Morocco (CN).
6. (CR8) Only contacts made 31 December 1961 and before count for this country.
7. (CR8, CR10) Only contacts made 14 September 1976 and before count for this country.
8. (DA-DM) Only contacts made 16 September 1973 and before count for this country. Contacts made 17 September 1973 and after count as either FRG (DA-DL) or GDR (Y2-Y9).
9. (EA9) Only contacts made 13 May 1969 and before count for this country.
10. (ET2) Only contacts made 14 November and before count for this country. Contacts made 15 November 1962 and after count as Ethiopia (ET).
11. (FF) Only contacts made 6 August 1960 and before count for this country.
12. (FH, FB8) Only contacts made 5 July 1975 and before count for this country. Contacts made 6 July 1975 and after count as Comoros (D6) or Mayotte (FH).
13. (FI8) Only contacts made 20 December 1950 and before count for this country.
14. (FN8) Only contacts made 31 October 1954 and before count for this country.
15. (FQ8) Only contacts made 16 August 1960 and before will count for this country.
16. (HK0, KP3, KS4) Only contacts made 16 September 1981 and before count for this country. Contacts made 17 September 1981 and after count as San Andres (HK0).
17. (I1) Only contacts made 31 March 1957 and before count for this country. Contacts made 1 April 1957 and after count as Italy (I).
18. (I5) Only contacts made 30 June 1960 and before count for this country.
19. (JD1/7J1) Only contacts made from 30 May 1976 to 30 November 1980 count for this country. Contact made 1 December 1980 and after count as Ogasawara (JD1).
20. (JZ0) Only contacts made 30 April 1963 and before country for this country.
21. (KR6, 8, JR6, KA6) Only contacts made 14 May and before count for this country. Contacts made 15 May 1972 and after count as Japan (JA).
22. (KS4) Only contacts made 31 August 1972 and before count for this country. Contacts made 1 September 1972 and after count as Honduras (HR).

23. (KZ5) Only contacts made 30 September 1979 and before count for this country.

24. (P2, VK9) Only contacts made 15 September 1975 and before count for this country. Contacts made 16 September 1975 and after count as Papua New Guinea (P2).

25. (PK1–6) Only contacts made 30 April 1963 and before count for this country. Contacts made 1 May 1963 and after count as Indonesia (YB).

26. (UN1) Only contacts made 30 June 1960 and before count for this country. Contacts made 1 July 1960 and after count as European RSFSR (UA).

27. (VO) Only contacts made 31 March 1949 and before count for this country. Contacts made 1 April 1949 and after count as Canada (VE).

28. (VQ1, 5H1) Only contacts made 31 May 1974 and before count for this country. Contacts made 1 June 1974 and after count as Tanzania (5H).

29. (VQ6) Only contacts made 30 June 1960 and before count for this country.

30. (VQ9) Only contacts made 28 June 1976 and before count for this country. Contacts made 29 June 1976 and after count as Seychelles (S7).

31. (VS2, VS4, ZC5, 9M2) Only contacts made 15 September 1963 and before count for this country. Contacts made 16 September 1963 and after count as West Malaysia (9M2) or East Malaysia (9M6, 8).

32. (VS9H) Only contacts made 29 November 1967 and before count for this country.

33. (ZC6, 4X1) Only contacts made 30 June 1968 and before count for this country. Contacts made 1 July 1968 and after count as Israel (4X).

34. (ZD4) Only contacts made 5 March 1957 and before count for this country.

35. (1M) Only contacts made 15 July 1972 and before count for this country. Contacts made 16 July 1972 and after count as Tonga (A3).

36. (7O/VS9K) Only contacts made 10 March 1982 and before count for this country.

37. (8Z4) Only contacts made 25 December 1981 and before count for this country.

38. (8Z5, 9K3) Only contacts made 14 December 1969 and before count for this country.

39. (9S4) Only contacts made 31 March 1957 and before count for this country.

40. (9U5) Only contacts made 1 July 1962 to 30 June 1962 count for this country. Contacts made 1 July 1962 and after count as Burundi (9U) or Rwanda (9X).

41. (Blenheim Reef) Only contacts made from 4 May 1967 to 30 June 1975 count for this country. Contacts made 1 July 1975 and after count as Chagos (VQ9).

42. (Geyser Reef) Only contacts made from 4 May 1967 to 28 February 1978 count for this country.

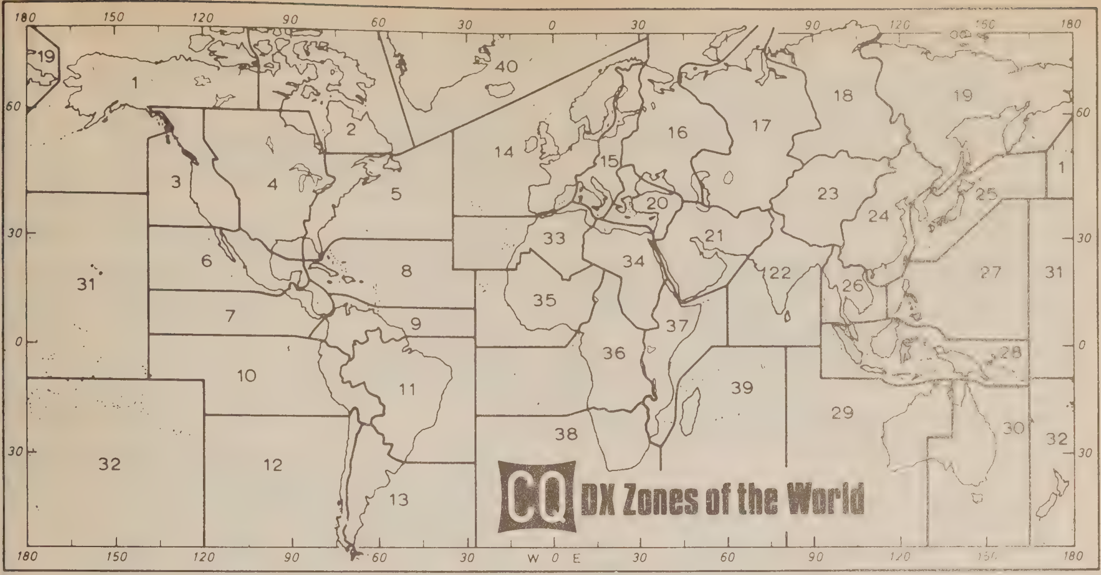
Prefix Cross References

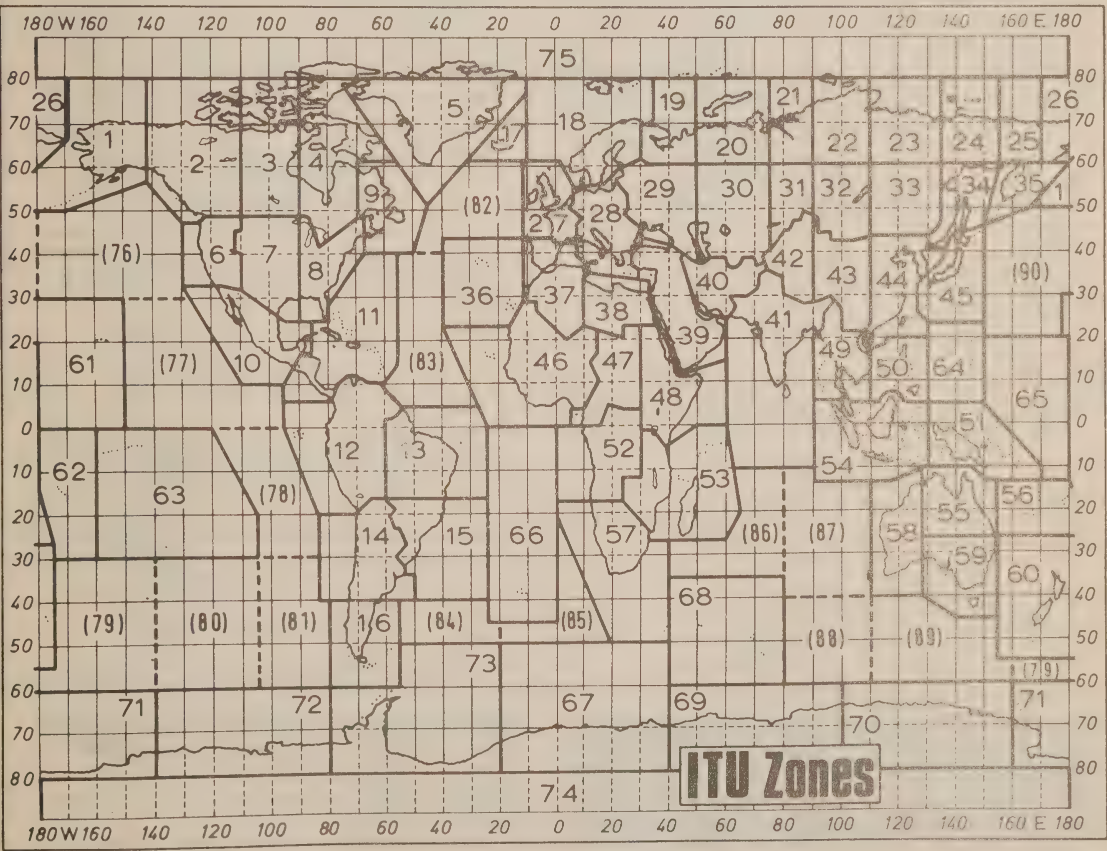
A8=EL
AC (before 1972)=A5
AH=KH
AL7=KL7
AM-AO=EA
AT-AW=VU
AX=VK
AY-AZ=LU
CF-CK=VE
CL=CO
CQ-CS=CT
CR3 (before 1974)=J5
CR4 (before 1976)=D4
CR5 (before 1976)=S9
CR6 (before 1976)=D2
CR7 (before 1976)=C9
CR9 (before 1985)=XX9
CT2 (before 1986)=CU
CX0=CE9/VP8
CY-CZ=VE
CY0 (before 1985)=CY9
DM-DT (before 1980)=Y2-9
EA0 (before 1969)=3C
EK, EM-EO, ER-ES, EU-EZ=U
FA-FF (after 1983)=F
FA (before 1963)=7X
FB8 (before 1961)=5R
FB8 (before 1985) =FT
FC (before 1985) =TK
FD8 (before 1961)=5V
FE8 (before 1961)=TJ
FL (before 1978)=J2
FU8 (before 1982)=YJ
GB=G
GC (before 1977)=GJ/GU
H2=5B
H3=HP
H5 (Bophutatswana)=ZS
H7=YN
HE=HB
HM (before 1982)=HL
HT=YN
HU=YS
HW-HY=F

J4=SV
KA1=JD1
KA2AA-KA8ZZ=JA
KB6 (before 1979)=KH1
KC4 (Navassa)=KP1
KG6 (before 1979)=KH2
KG61 (before 1970)=JD1
KG6R, S, T, (before 1979)=KH0
KJ6 (before 1979)=KH3
KM6 (before 1979)=KH4
KP4 (Desecheo)=KP5
KP6 (before 1979)=KH5
KS6 (before 1979)=KH8
KV4 (before 1979)=KP2
KW6 (before 1979)=KH9
L2–9=LU
LY=UP
M1 (before 1984)=T7
MP4B (before 1972)=A9
MP4M (before 1972)=A4
MP4Q (before 1972)=A7
MP4T, D (before 1972)=A6
NH=KH
NL7=KL7
NP=KP
OQ (before 1961)=9Q
P4 (before 1986)=PJ
PX (before 1970)=C3
RA, RN=UA
RB-RR=UB-UR
RS=U
RT=UB
RU-RZ=U
S4 (Ciskei)=ZS
S8 (Transkei)=ZS
T4=CO
T4 (Venda)=ZS
TH, TM, TO-TQ, TV-TX=F
UN, UV, UW, UZ=UA
V9 (Venda)=ZS
VA-VG=VE
VH-VN=VK
VK9 (Nauru)=C2
VP1 (before 1982)=V3

VP2A (before 1982)=V2
VP2D (before 1979)=J7
VP2G (before 1975)=J3
VP2K (before 1984)=V4 or VP2E
VP2L (before 1980)=J6
VP2S (before 1980)=J8
VP3 (before 1967)=8R
VP4 (before 1963)=9Y
VP5 (Jamaica)=6Y
VP6 (before 1967)=8P
VP7 (before 1974)=C6
VQ2 (before 1965)=9J
VQ3 (before 1962)=5H
VQ4 (before 1964)=5Z
VQ5 (before 1963)=5X
VQ8 (before 1969)=3B
VQ8 (Chagos)=VQ9
VQ9 (Seychelles)=S7
VR1 (before 1980)=T30/31
VR2 (before 1971)=3D2
VR3 (before 1980)=T32
VR4 (before 1979)=H4
VR5 (before 1971)=A3
VR8 (before 1979)=T2
VS1 (before 1966)=9V
VS5 (before 1985)=V8
VS7 (before 1949)=4S
VS9A, P, S (before 1968)=7O
VS9M=8Q
VS9O (before 1961)=A4
VX-VY=CY0/VE
WH=KH
WL7=KL7
WP=KP
XJ-XO=VE
XP=OX
XQ-XR=CE
XV=3W
XX7 (before 1976)=C9
YL=UQ
ZB1 (before 1965)=9H
ZD1 (before 1962)=9L
ZD2 (before 1961)=5N
ZD3 (before 1966)=C5

ZD4 (before 1958)=9G
ZD5 (before 1969)=3DA
ZD6 (before 1965)=7Q
ZE (before 1981)=Z2–9
ZK9 (1983)=ZK2
ZM6 (before 1963)=5W
ZM7 (before 1984)=ZK3
ZS7 (before 1969)=3D6
ZS8 (before 1967)=7P
ZS9 (before 1967)=A2
ZV-ZZ=PY
3B-3C (before 1968)=VE
3D6 (before 1988)=3DA
3G=CE
3Z=SP
4A-4C=XE
4D-4I=DU
4J-4L=U
4M=YV
4N-4O=YU
4T=OA
4U1VIC=OE
4V=HH
5J-5K=HK
5L-5M=EL
6C=YK
6D-6J=XE
6O=T5
6T-6U=ST
7A-7I=YB
7G (before 1967)=3X
7J-7N=JA, JD
7S=SM
7Z=HZ
8A-8I=YB
8J-8N=JA
8O=A2
8S=SM
9A (before 1984)=T7
9B-9D=EP
9E-9F=ET


CQ DX Zones of the World


ITU Zones

Slow Morse Transmissions

(Compiled from *Break-In* ZL1AN "Morseman" Column)

3550kHz Alf ZL4SD, Neville ZL4CI—Monday-Friday 0730–0930 NZST or 0800–0900 NZDT. (January/February 1990.)

3560kHz Richard ZL1BOK—Monday-Thursday from 2030 hours. Starts at 6wpm increasing to 12wpm over the next hour. Computer generated at 12wpm rate. (July, November 1989. March 1990.)

3698kHz VK2RCW (Sysop Barry VK2AAB)—Continous morse practise station and beacon operated by Hornsby and Districts Radio Club. Outputs the edited contents of a local Packet Radio bulletin board at 12wpm. (May 1990.)

3755kHz Fred ZL1SP—Branch 65 Frequency. Monday-Friday 1900 local time except first and second Wednesday of the month.

This is not a beginners' group but a polish up session for those approaching test standard. Seven three-minute blocks of text at 13wpm plus read back. (April 1990.)

MORSE CODE TRAINING

PETER SMITH, ZL1ARB

Sooner or later, every would-be amateur is faced with the problem of learning the Morse Code. How this is attempted will, of course, depend on the student's particular circumstances but it has been established that for the majority of learners, any problems associated with mastering the code stem directly from the manner of their introduction to it.

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C-SEVEN	Random letters, figures and special characters, 10–15 wpm	$ 5.50	$ 5.50
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Readability

1—Unreadable.
2—Barely readable, some words distinguishable.
3—Readable with considerable difficulty.
4—Readable with practically no difficulty.
5—Perfectly readable.

Signal Strength

1—Faint signals barely perceptible.
2—Very weak signals.
3—Weak signals.
4—Fair signals.
5—Fairly good signals.
6—Good signals.
7—Moderately strong signals.
8—Strong signals
9—Extremely strong signals.

Tone

1—Harsh, broad hiss, no perceptible tone.
2—Harsh, broad hiss, just perceptible tone.
3—Harsh, broad non-sinusoidal tone.
4—Harsh, broad tone, badly hum-modulated.
5—Poor sinewave, badly hum-modulated.
6—Good sinewave, pronounced hum modulation.
7—Good sinewave, definite hum modulation.
8—Excellent sinewave, just perceptible hum modulation.
9—Perfect sinewave.

The "tone" scale is used for reporting the amount of hum on a CW signal. If the signal has chirp, the letter "C" can be appended. If the signal has key-clicks, the letter "K" can be appended. Most of the signals you hear will be T9.

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Abbreviations for CW Work

ABT	About
AGN	Again
ANT	Antenna
AR K	End of transmission
AR VA	Final end of transmission
AS	Wait
BCI	Broadcast interference
BCL	Broadcast listener
BK	Break; I wish to break-in (interrupt) a transmission in progress
BN	All between; been
BUG	Semi-automatic key
B4	Before
C	Yes
CL	I am closing my station; call
CPI, CPY	Copy
CQ	Calling any station
CUAGN	See you again
CUD	Could
CUL	See you later
CW	Continuous wave, i.e. radio telegraphy
DE	From
DR	Dear
DX	Distance, foreign countries
ER	Here
ES	And; &
FB	Fine business, excellent
FER	For
FM	Frequency modulation; From
GA	Go ahead, continue sending; good afternoon
GB	Goodbye
GE	Good evening
GG	Going; grounded grid
GM	Good morning
GN	Good night
GND	Ground
GUD	Good
HI	Laughter; High
HPE	Hope
HR	Here; Hear; Hour
HV: HVE	Have
HW	How
K	Go ahead
KN	specific station go ahead
MA:MILS	Milliamperes
MNI	Many
MSG	Message
N	No; North
NCS	Net control station
ND	Nothing doing
NIL	Nothing; I have nothing for you
NR	Number
NW	Now

OB	Old boy
OC	Old chap
OM	Old man
OP; OPR	Operator
OT	Old timer; Old top
PSE;	Please
PWR	Power
R	Received as transmitted; are (sometimes also used as a decimal point, e.g. 1R5)
RCVR; RX	Receiver
REF	Refer to; Referring to; Reference
RFI	Radio frequency interference
RIG	Station equipment
RPRT, REPT	Report
RPT	Repeat; I repeat
RTT; RTTY	Radioteletype
RX; RCVR	Receiver
SA	Say
SASE	Self-addressed, stamped envelope
SED	Said
SIG	Signal
SKED	Schedule
SRI	Sorry
SSB	Single sideband
SUM	Some
T	Zero (0)
THO	Though
THRU; THRO	Through
TMW	Tomorrow
TNX; TKS	Thanks
TT	That
TU; TKU	Thank you
TVI	Television interference
TX	Transmitter
TXT	Text
U	You
UR	Your; You are (sometimes YR)
URS	Yours (sometimes YRS)
VFO	Variable frequency oscillator
VY	Very
WID	With
WKD; WKG	Worked; Working
WL	Well; Will
WUD	Would
WX	Weather
XCVR	Transceiver
XMTR; TX	Transmitter
XTAL	Crystal
XYL; YF	Wife
YL	Young lady
73	Best Regards
88	Love and kisses

More articles are required for "Break-In"

CAN YOU HELP?

The Q-Code

QRG	Will you tell me my exact frequency (or that of ...)? Your exact frequency (or that of ...) is ...kHz.
QRH	Does my frequency vary? Your frequency varies.
QRI	How is the tone of my transmission? The tone of your transmission is ... (1. Good; 2. Variable; 3. Bad)
QRK	What is the intelligibility of my signals (or those of ...)? The intelligibility of your signals (or those of ...) is ... (1. Bad; 2. Poor; 3. Fair; 4. Good; 5. Excellent)
QRL	Are you busy? I am busy (or I am busy with ...) Please do not interfere.
QRM	Is my transmission being interfered with? Your transmission is being interfered with ... (1. Nil; 2. Slightly; 3. Moderately; 4. Severely; 5. Extremely)
QRN	Are you troubled by static? I am troubed by static ... (1–5 as under QRM)
QRO	Shall I increase power? Increase power.
QRP	Shall I decrease power? Decrease power.
QRQ	Shall I send faster? Send faster (... wpm).
QRS	Shall I send more slowly? Send more slowly (...wpm)
QRT	Shall I stop sending? Stop sending.
QRU	Have you anything for me? I have nothing for you.
QRV	Are you ready? I am ready.
QRW	Shall I inform ... that you are calling him on ...kHz? Please inform ... that I am calling on ...kHz.
QRX	When will you call me again? I will call you again at ... hours (on ...kHz).
QRZ	Who is calling me? You are being called by ... (on ...kHz)
QSA	What is the strength of my signals (or those of ...)? The strength of your signals (or those of ...) is ... (1. Scarcely perceptible; 2. Weak; 3. Fairly good; 4. Good; 5. Very good)
QSB	Are my signals fading? Your signals are fading.
QSD	Are my signals mutilated? Your signals are mutilated.
QSK	Can you hear me between your signals and if so can I brea in on your transmission? I can hear you between my signals; break in on my trans mission.
QSL	Can you acknowledge receipt? I am acknowledging receipt.
QSM	Shall I repeat the last message I sent you, or some previou message? Repeat the last message which you sent me [or message(s number(s) ...]
QSN	Did you hear me (or ...) on ...kHz? I did hear you (or ...) on ...kHz.
QSO	Can you communicate with ... direct or by relay? I can communicate with ... direct (or by relay through ...)
QSP	Will you relay to ...? I will relay to ...
QST	General call preceding a message addressed to all amateurs and ARRL members.
QSU	Shall I send or reply on this frequency (or ...kHz)? Send or reply on this frequency (or ...kHz).
QSV	Shall I send a series of Vs on this frequency (or on ...kHz)? Send a series of Vs on this frequency (or on ...kHz)
QSW	Will you send on this frequency (or on ...kHz)? I am going to send on this frequency (or on ...kHz)
QSX	Will you listen to ... on ...kHz? I am listing to ... on ...kHz.
QSY	Shall I change to transmission on another frequency? Change to transmission on another frequency (or on ...kHz).
QSZ	Shall I send each word or group more than once? Send each word or group twice (or ... times).
QTC	How many messages have you to send? I have ... messages for you (or for ...)
QTH	What is your location? My location is ...

(QTHR—Location as per *Call Book*)

QTR	What is the correct time? The time is ...

International Morse Code

Morse Alphabet

A	• —
B	— • • •
C	— • — •
D	— • •
E	•
F	• • — •
G	— — •
H	• • • •
I	• •
J	• — — —
K	— • —
L	• — • •
M	— —
N	— •
O	— — —
P	• — — •
Q	— — • —
R	• — •
S	• • •
T	—
U	• • —
V	• • • —
W	• — —
X	— • • —
Y	— • — —
Z	— — • •

Numerals

1	• — — — —
2	• • — — —
3	• • • — —
4	• • • • —
5	• • • • •
6	— • • • •
7	— — • • •
8	— — — • •
9	— — — — •
0	— — — — —

Procedure Signals

Full stop	(.)	• — • — • —
Comma	(,)	— — • • — —
Colon	(:)	— — — • • •
Question mark/Repeat	(?)	• • — — • •
Apostrophe	(’)	• — — — — •
Hyphen/dash	(-)	— • • • • —
Fraction bar	(/)	— • • — •
Parenthesis (left hand)	(( )	— • — — •
Parenthesis (right hand)	( ))	— • — — • —
Quotation marks	(“)	• — • • — •
Error		• • • • • • • •

Spacing and length of signal

1. A dash is equal to three dots.
2. The space between the signals which form the same letter is equal to one dot.
3. The space between two letters is equal to three dots.
4. The space between two words is equal to seven dots.

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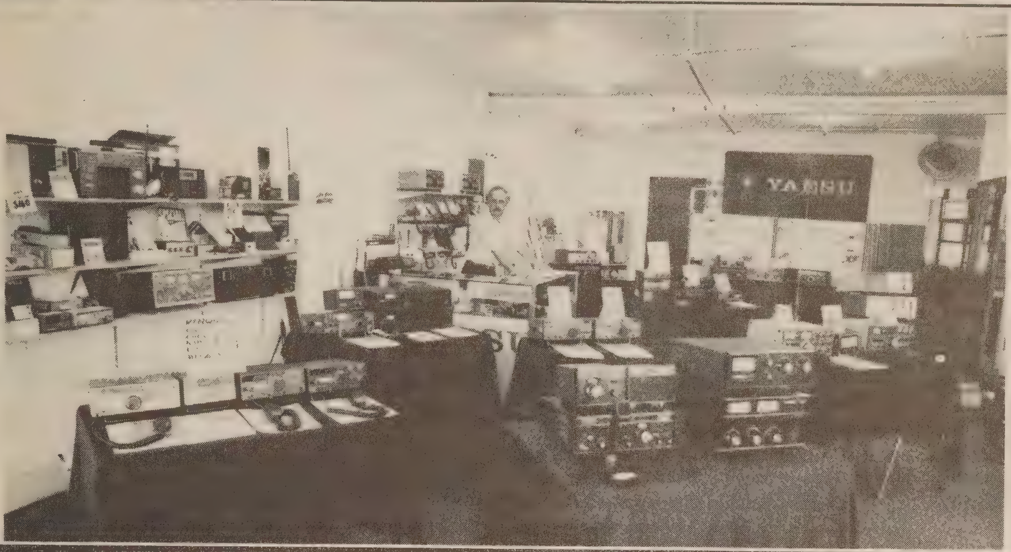

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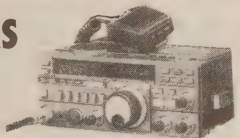

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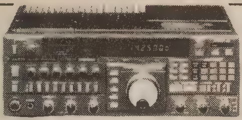

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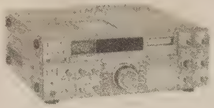

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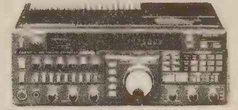

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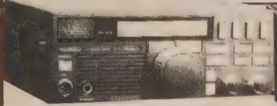

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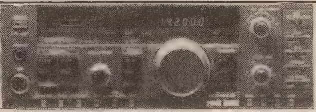
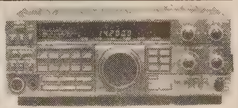


KENWOOD TS 680S: A high performance HF transceiver, for SSB, CW, AM, FM for all amateur bands 160m - 30mHz. Compact and versatile.



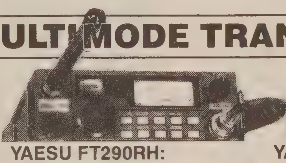
KENWOOD TS440S: A most versatile rig. Again, not sparing the extras - automatic ATU built in. P/S req for consant base use. Very compact, this little rig is MUCH more than a mobile.

VHF UHF MOBILE - BASE MULTIMODE TRANSCEIVERS

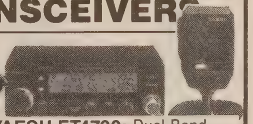
YAESU TWINS:
TOP SHELF
VHF & UHF MOBILES

YAESU FT 212RH:
Yaesu's prestigious 45 Watt compact CPU controlled FM Base-Mobile transceiver, for two metres.

YAESU FT712RH:
The matching UHF version of the 212. 35 Watts on 70cm.

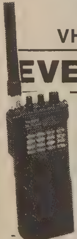


YAESU FT290RH:
Most versatile 2m transceiver. A full 25 Watt multimode, doubles as a 5 Watt shoulder pack. Perfect for AREC or SAR.

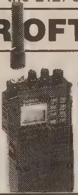


YAESU FT4700: Dual Band. Expensive, but totally impressive. This rig has total versatility. Typical Upper Echelon equipment from Yaesu.

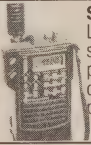
EVER POPULAR OFTEN ESSENTIAL AMATEUR HANDLEHELDS



YAESU FT411:
LATEST, Ultra compact 2M h/h with a huge range of features. 49 tunable memories, 2 VFO's, 16 keys. Scans. Up to 5W output.



YAESU FT73R: Ultra compact, with many features. Rain proof, an ideal outdoor rig. CPU controlled, 10 memories. Scans, up to 5W o/p.

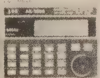


STANDARD 150E:
Latest addition to our stock range. This complete package includes charger, spare battery pack. Ideal 2m Handheld

YAESU FT470RH:
Compact, includes the new F Band (Police). Capable of 5W RF, well weatherproofed, an ideal unit for a wide range of uses.

RECEIVERS

Quality Communications Receivers, for Amateur or SWL alike:
NRD 525
FRG8800
R5000



SCANNERS

VHF/UHV programmable Scanning Receivers & Monitors:
BJ200 Black Jaguar
AOR2002, AOR3000
FRG9600
Standard AX700

EXTRAS

ANCILLARY EQUIPMENT:
PK232 Data Terminal
Tokyo HiPower
VHF/UHF Linear The
Curtis Keyer
Power Supplies

Extras, Accessories, Bits & Pieces

A big range of all sorts of Station Extras: **ATU's, SWR Bridges, Dummy Loads, Coaxial Switches, Clocks, Speakers, Coax Cable, 450 Ohm ladder line, Plugs, Connectors, Adaptors. In fact, we can usually supply just about any station accessory you need -right off the shelf. Give us a call.**

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GETTING OUT *—That's what it's all about!*

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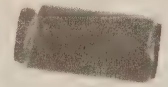
Out great range of HiTec antennas made especially for Com-Centre

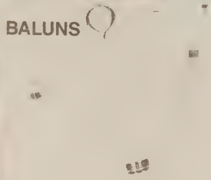
★ HF ANTENNAS:

CS3Y	3 element Yagi-20/15/10 metres 300W, 3.6m boom	$497
CS7V	7 band vertical, 160-10m Height 8m	$393

COM-SLOPER complete 80-10m dipole kit. Popular for fixed or portable ....$ 96

TRAPS: For multiband dipoles, all bands .. pair: $90





Toroidal baluns, PL259, up to 30mHz. 1:1 and 4:1 .... $72

◄TRIDENT MOBILE:
A Top performer, this convenient mobile whip covers 80-10 metres, tunable over 80m, and comes complete with mount $169

★ VHF ANTENNAS:

CS25Y	5 element 2m Yagi 2m boom	$ 82
CS210Y	10 ele. 2m Yagi 4m boom	$144
A	CS2C 2m mobile vert. collinear	$ 46
B	CS258 2m 5/8 mobile whip	$ 35
C	MOPOLE: 2m ½w whip. No radials req. Complete with SO239 mount	$ 59
D	HOT ROD: Hi Gain telescopic whi handhelds	$ 59
RINGO:	2m base antenna	
RADIAL KIT	for base use of mobile VHF antennas	$ 45

★ UHF ANTENNAS:

E	CS7C 70cm mobile collinear	$ 27
CSUY	12 element 70cm Yagi	$112

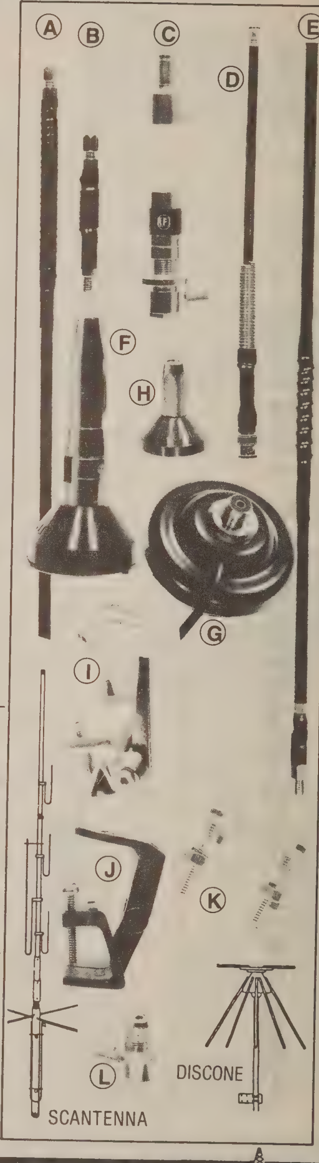
★ SPECIAL PURPOSE:

SCANTENNA: VHF/UHF 30-500mHz broad band High gain vertical. Ideal for 6, 2, 70cm transceive, BRILLIANT for Scanners. 3.4m high, 50 ohm input. $174

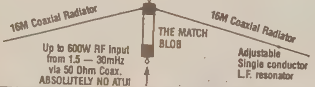
DISCONE: Wide band multifrequency omnidirectional for 70-450mHz $187

★ MOUNTS for above antennas:

F	Hinge mount	$ 40
G	Magnetic Base, with SO239	$ 72
	Magnetic Base complete with Mopole	$120
H	Small fixed base for bonnet/boot	$ 20
I	Universal De Luxe gutter mount	$ 18
J	Rigid plastic gutter mount	$ 12
K	Mirror or pole mount	$ 14
L	SO239 mobile coaxial socket	$ 11



A FANTASTIC WAY TO START - OR TO UPDATE!


16M Coaxial Radiator
16M Coaxial Radiator
THE MATCH BLOB
Up to 600W RF input from 1.5 — 30mHz via 50 Ohm Coax. ABSOLUTELY NO ATU!
Adjustable Single conductor L.F. resonator

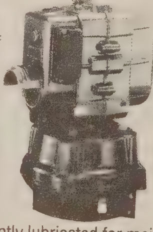
THE 'ALL HF-ALL BANDS' BLACK COAXIAL DIPOLE

This little beauty can be strung up almost anywhere. We've tried! It will load without any trouble, straight into the back of the rig.

— DO NOT USE AN A.T.U.! —

This antenna will perform from 1.8 to 30mHz, with a flat SWR (we found it 1.7:1) throughout. Not just a beginner's antenna, this performs creditably against trapped dipoles and verticals. As a broad-band base or portable antenna, this is exceptional. **And it is only $290. You couldn't build an ATU for that!**

ROTATORS



YAESU's range of both Azimuth and Alt-Azimuth rotators were designed and manufactured by rotator specialists.

They are made to last a lifetime, in weatherproof melamine coated aluminium, permanently lubricated for maintenance free operation.

MODEL	APPLICATION	PRICE
G- 250	Light duty	$ 222
G- 400	Light/medium duty	$ 495
G- 600	Medium duty	$ 765
G-1000	Heavy duty	$ 844
G-500A	Elevation only	$ 435
G-5400	Alt-azimuth	$1033
G-5600	Alt-azimuth	$1247

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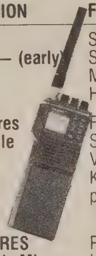
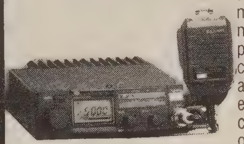
COM-CENTRE'S AMATEUR EQUIPMENT PRICE GUIDE

At Com-Centre, N.Z.'s largest communications equipment emporium, handling equipment from all the recognised manufacturers, we have the opportunity to appraise daily a great diversity of new and used gear that passes through our hands. Our responsibility to our clients is to ensure you acquire equipment best suited to your requirements, and of course at a price to suit the budget! It is not possible to furnish full details in this sectionalised guide, but I can assure you of an honest appraisal and every assistance in making any decision concerning our Amateur Radio equipment

Section 1: VHF/UHF EQUIPMENT.





CLASSIFICATION	FEATURES & APPLICATION	LIMITATION	PRICE RANGE	SOME MODELS COMMONLY AVAILABLE
2 METRES: Hand Helds — (early)	Second work-horse handheld. Standby in the car. Monitoring local repeater Hand field work, AREC etc.	Lack of memories Availability of battery packs No scan, search etc.	$200 — $350, depending on extras	AOR 240 SEEC T1200 Yaesu FT207 ICOM 2A
70 CM/2 Metres Programmable Handhelds	Full facilities offered on Base stations. e.g. Scan, Memories etc. Portable or base use. Versatile system. Field use - AREC etc. Keypad Freq. entry. Extended coverage possible.	Power o/p, unless additional linear amp. fitted. Limited operation period if operated on batteries. Mobile operation difficult without optional spkr/mic. Limited simplex coverage. Requires familiarity with operation.	$400 — $800 depends on extras	Yaesu FT209RH, FT709RH Kenwood TR3500, 3600, 2500, 2600, TH215, TH415 ICOM IC02A, IC04A Kenpro KT220
70CM/2 METRES Programmable Micros	Pocket sized portables. Most features of larger handhelds, but often without keypad freq. entry. Rugged construction for demanding application.	As with larger handhelds	$400 — $650	Yaesu FT23/73 Kenwood TH25/45 ICOM Y2A, Y4A
70CM/2 METRES Mobile Transceivers	Designed primarily for mobile operation although suitable for base use with appropriate power supply. Excellent in any mobile installation with new sets shrinking as mounting space in cars lessens. Fully programmable, most with extended coverage. Power from 10 - 80 watts, 25 or 45 accepted as normal. Most user-friendly for ease of mobile operation. Extremely competitive market with additional features on every new model. Some dual band rigs available.	Power supply additional if base operation required. Generally FM only for simplex/repeater work. Size can be problem when mounting earlier sets. Some earlier digital displays difficult to read. Too many bells & whistles unnecessarily complicate simple mobile use. Diplexer or multi-band antenna necesary for dual banders.	$350 — $1000 Dual Banders from $1200	Wide range is constantly changing. Currently: Kenwood TM201, TM421, TR7730, TM2530,TM2550, TM2570 Yaesu FT211, FT2700 ICOM IC25, IC27, IC28, IC3200 and many many more models
70CM/2 METRES Multimode Transceivers	Primarily base station use, with most including a built-in power supply. Essential for accessing satellites. prestigious in appearance & application for keen VHF/UHF DXing enthusiast. Many capable of high power operation. Some have multiband facilities — 15-10-6-2-70cm etc. Yaesu's latest FT767GX incorporates VHF/UHF in the single General Coverage Transceiver.	Complicated in mobile application. Other than satellite work FM tends to be most favoured mode. Expensive for single band operation. Most too large for mobile installation. "User Friendliness" if simple repeater-FM use is common operation.	$500 — $2200	Kenwood TS711, TS751, TS700 ICOM C251, IC271, IC211 Yaesu FT726, FT767

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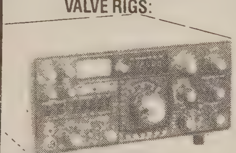
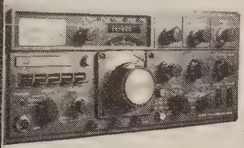
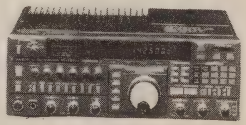
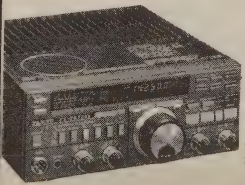
Section 2: HF EQUIPMENT:

CLASSIFICATION	FEATURES & APPLICATION	LIMITATION	PRICE RANGE	SOME MODELS COMMONLY AVAILABLE
VALVE RIGS: 	Second standby station. Beginners base station. Usually incorporates matching power supply as a complete ready-to-go HF Station. Always represents good value if operator can support own equipment.	Requires Tender Loving Care to maintain specs. Increasing difficulty acquiring spares. Receiver sensitivity & Freq stability not comparable with modern equipment. Generally limited to mains operation. Decline in popularity - replaced with solid state equipment.	$180 — $400	TRIO 599 Yaesu FT200, FT400/401 Swan 350/500 Collins, Drake, National NCX series
VALVE FINALS: 	Improved receiver specifications, especially frequency stability and reliability. Ideal second station. Still very popular internationally as Amateur Base Station. Many later models have all the modern bells & whistles, including digital display, WARC bands etc. Tolerates greater mismatch than S/S gear.	Most limited to mains operation. Require "Loading and Tuning" before transmitting. Size, although most incorporate full mains power supply.	$400 — $1100	Yaesu FT101 Series FT560, FT901. Kenwood TS520, TS530, TS820, TS830, TS900,
SOLID STATE (earlier)	High performance receiver characteristics, the extras generally reflected in the price. 12 volt operation, ideal for mobile. Require power supply, generally 20 amps, for base use. Size enables portable or mobile operation. Broad-Band final amplifiers require no tuning of transmit stages. New models incorporate the WARC bands. Improved reliability and stability.	Require nominal 50 ohm antenna, therefore ATU often required to optimise performance. Power supply cost for base use needs consideration. No general coverage receiver facility.	$600 — $1200	Icom: IC701, IC720, IC730, IC740. Yaesu: FT908, FT301, FT7(B). Kenwood: TS120(S/V), TS130(S/V), TS180 
GENERAL COVERAGE TRANSCEIVERS 	The latest in Amateur equipment. Fully solid state, covering all Amateur bands and incorporating a general coverage receiver. 3 major manufacturers have settled on a similar approach: 1: An economy rig, limiting the extras incorporated in packaging and simplifying operation and price tag. 2: A versatile up-market rig for mobile, portable or base operation with little spared in extras. 3: The ultimate in Amateur Station equipment, designed primarily for prestigious base station use, incorporating power supplies, ATU's etc.	The Bank balance!	$1900 — $11,000	►Yaesu: FT747 ($1995); Kenwood TS140/680 ($2150); Icom IC735 ($2255). ►Yaesu FT757 (2250); Kenwood TS440 ($2570); Icom IC751a ($2495), IC761. ►Yaesu FT767 ($4100); Kenwood TS940 ($4686); Icom IC781 ($10.450).

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Time and Frequency

Review of Timekeeping in New Zealand

The DSIR took over responsibility for the Time Service when he Department was formed in 1926, but the story goes back much Further.

It all began in 1862, when Captain Stephen Carkeek, Controller of Customs, recommended to the Superintendent of Wellington Province that a transit instrument, an astronomical clock, and a time ball be placed in the new Custom House which was to be erected on what eventually became the site of the General Post Office.

A transit instrument allows mean local time to be calculated. This is the time appropriate to the longitude of the point of measurement, relative to the Greenwich Meridian, allowing four minutes per degree of longitude, or one hour per 15 degrees. It was not until 1868 that the General Government proclaimed a uniform time for New Zealand based on the meridian 172° 30' East. The advent of the telegraph had made rapid communications possible and therefore the concept of a uniform time feasible without the need for observations in every town and port. New Zealand was in fact the first country to establish a uniform time by legislation, and its scientists played an important role in establishing uniform time zones in certain other countries.

A new Colonial observatory was built in Wellington in 1869 in the Bolton Street Cemetery, on the site where the Richard John Seddon memorial now stands. Seddon's death in 1906, and the choice of the site for the memorial, precipitated the move of the Observatory to its present site in the Botanical Gardens in Kelburn. A small red brick building was erected on the site of the old Gardens Battery. It was completed in 1907 and became known as the Hector observatory, after Sir James Hector, who had been Director of the Colonial Observatory.

Experiments with radio time signals began in 1916, with the reception of signals from Melbourne and transmission to ships in the vicinity of New Zealand and to Tahiti. Other regular services were established in 1919.

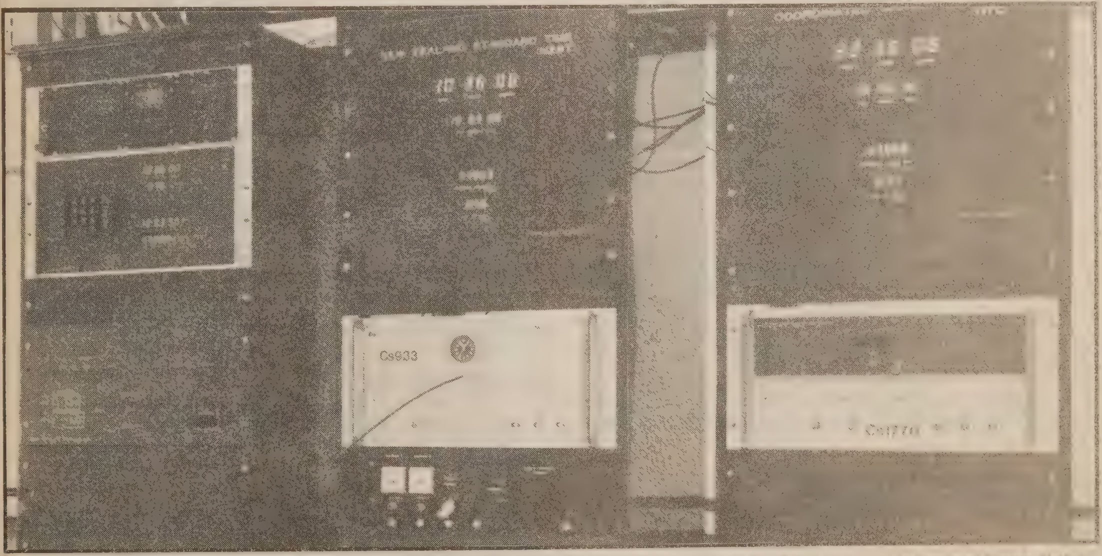
In 1926 the Department of Scientific and Industrial Research was formed, and became responsible for the Time Service. Although precision in time signals of a quarter of a second was claimed until the 1950s, the actual errors were often greater than this. The Geophysics Division of the DSIR was formed in 1951, and took over administrative responsibility for the Time Service. It was not until 1962, however, that any real advances were made. Clocks which used the very stable electrical oscillations of quartz crystals were installed. Checks were made regularly against radio time signals from overseas which were obtained from astronomical observations, and appropriate corrections were made for the propagation time to Wellington.

More recently, the world's time has been related to an even more stable clock than our rotating earth—the vibrations of the caesium atom. Each element has its characteristic frequency of vibration, such as that of sodium which gives us the familiar orange colour of highway lighting. Although the characteristic frequency of caesium is particularly stable, a caesium clock on its own does not constitute a time standard. Rather, information from caesium clocks maintained by standards laboratories around the world is collated by the Bureau International des Paids et Mesures (BIPM) in Paris to provide Co- ordinated Universal Time (UTC), often abbreviated to Universal Time (UT).

Time and Frequency Standard

In 1987 responsibility for the Time Service passed to the Physics and Engineering Laboratory (PEL), DSIR, at Gracefield, Lower Hutt, where the New Zealand time standard is maintained by means of three caesium clocks. Linkage to the BIPM is via the VLF Omega navigation system which provides time to within ten microseconds, and via the Global Positioning Satellite system which gives accuracies of better than one microsecond. The geostationary GOES satellite provides a back-up time code accurate to about 100 microseconds.

The time standard is also New Zealand's frequency standard, accurate to parts in 10^{13}. Standard frequency dissemination to New Zealand users is via the TV1 and TV2 television transmissions. The colour burst frequencies of these transmissions are controlled by rubidium oscillators which are monitored against the PEL caesium clocks, and are usually within parts in 10^{11} of the nominal colour burst frequency of 4.43361875MHz. The highest accuracies, approaching one part in 10^{12}, are obtained by comparing the timing of selected synchronisation pulses with results obtained at PEL.



Two of the three atomic clocks constituting the New Zealand time and frequency standard (lower centre and lower right). The time pip generator is upper left.

New Zealand Standard Time and Daylight Saving

The Mean Time Act of 1868 gave us a time of 11 hours 30 minutes ahead of Greenwich Mean Time. This was until 1927 when clocks were advanced one hour for summer. This daylight saving measure was not well received, so in the following year the advance was reduced to half an hour. After the advance in 1944 the clocks were not put back for the winter. Because this was equivalent to adopting a new standard meridian, the position was regularised by the New Zealand Standard Time Act of 1945. New Zealand Standard Time is thus 12 hours ahead of Greenwich Mean Time, now called Universal Time (UT), i.e. it is the mean time for the 180° meridian. The Time Act of 1974 allowed for an advance of one hour, normally from 0200 hours NZST on the last Sunday in October until 0200 hours NZST on the first Sunday in March of the following year. This defined New Zealand Daylight Time (NZDT) to be 13 hours ahead of Universal Time. In 1989/90 daylight saving was extended, starting on the first Sunday in October and finishing on the third Sunday in March.

Local Time Signals

The most widely used time signals are those broadcast by the Broadcasting Corporation of New Zealand, both on the National Programme and some commercial stations. Some private radio stations also broadcast the time signals. These signals are transmitted every hour and consist of six "pips" of 1000 Hz tone, at one second intervals, the beginning of each pip marking the exact second. When a pip marks the exact hour, its length is doubled. The precision with which the beginning of the long pip marks the exact hour is usually less than 10 microseconds as it leaves PEL. Delays along telephone lines to the Broadcasting Corporation and in radio propagation to the remote parts of New Zealand can amount to a few milliseconds.

On certain occasions there are seven pips broadcast. This happens when, by international agreement, Universal Time is delayed by one second to keep it in step with astronomical time as determined by the Earth's rotation. This is done when necessary, but is not predictable because the Earth's rotation rate is variable when compared with the extremely stable caesium clocks. Universal Time was set up to be slightly fast, so that a "leap second" could be added on the first day of January or July, if necessary.

Talking Clock

The DSIR operates a talking clock which is made available to the New Zealand public via the Telecom NZ 0900 service for a standard charge, currently 65 cents per call from anywhere in New Zealand. On dialling 0900 45-678 to access the talking clock, the user receives a voice announcement of the time followed by three "pips" of 1000Hz tone. The start of the third pip is the exact time. The announcement and pips are repeated at 10 second intervals to give six time announcements in all, ensuring that the full minute is always included. The accuracy of the talking clock is limited by the propgagation delay of the telephone network which would not normally exceed 30 milliseconds for the remotest parts of New Zealand.

Why all this accuracy?

There will always be a need for accurate time-keeping. Digital watches are now commonplace, and their owners are naturally conscious of accurate time. In the scientific community, astronomers and seismologists, among others, need access to accurate clocks for their measurements, and it is very convenient to have time signals obtainable via the broadcast band on any domestic radio.

Every effort will be made to ensure that the accuracy of the time signals is maintained, and perhaps even improved as technology develops.

WWV and WWVH

The National Bureau of Standards broadcasts standard time and frequency transmissions continuously through stations WWV and WWVH.

Station WWV is located at Fort Collins, Colorado and broadcasts continuously on the radio frequencies of 2.5, 5, 10, 15 and 20MHz. Station WWVH is located at Kauai, Hawaii and broacasts continuously on the radio frequencies of 2.5, 5, 10 and 15MHz.

Both stations are controlled by caesium atomic oscillators. The frequencies are stable to better than one part in 10^{11} at all times, compared with the primary atomic standards maintained at the NBS Boulder laboratories. Changes in the propagation medium cause frequency changes which are several orders greater than the uncertainties described above.

Standard Time Signals

Seconds pulses are transmitted continuously, even during tones and announcements, and are derived from the same oscillator which generates the carrier frequency. Each minute, except the first of the hour begins with an 800 millisecond tone of 1000Hz at WWV and 1200Hz at WWVH. The first minute of the hour begins with an 800 millisecond tone of 1500Hz from both stations.

All time announcements are referred to in terms of Co-ordinated Universal Time, UTC. More precisely, the actual time scale is the Co-ordinated Universal Time Scale as maintained by the NBS.

The 0 to 24 hours system is used starting with 0000 at longitude zero. The first two figures give the hour and the last two figures give the minutes past the hour when the tone returns. The time announcement refers to the end of an announcement interval, i.e., to the time when the 0.8 second long audio tone begins.

At WWV a male voice announcement of Co-ordinated Universal Time is given during the last 7.5 seconds of each minute. At 1035 UTC for instance, the voice announcement, given in English, is: "At the tone, ten hours thirty-five minutes Co-ordinated Universal Time".

At WWVH a female voice announcement of UTC is given during the period 45 seconds to 52.5 seconds after the minute. It should be noted that the voice announcement of WWVH precedes that of WWV by 7.5 seconds. However, the tone markers referred to in both announcements occur simultaneously, although they may not be so received due to propagation effects. The use of a female voice at WWVH and a male voice at WWV assists in distinguishing the two stations.

Universal Time Corrections

With the use as from the beginning of 1972 of the atomic time scale as the International time scale and because the rate of rotation of the earth is not constant, differences between mean solar time (UTI) and the atomic time will accrue which in time could become inconvenient. It is therefore necessary to make periodic adjustments to the atomic scale so that it roughly approximates UTI. Therefore, instead of frequent small corrections, as in the past, large corrections of one full second will be made at infrequent intervals, which are not expected to average more than one a year and will usually be made on the last day of either June or December.

An adjustment was made on December 31, 1989 of one second so that the atomic time scale now leads UTI by 25 seconds. The atomic time scale will thus be at all times within 0.7 seconds of mean solar time. These corrections will be encoded and broadcast once every minute from both stations.

The method of coding UTI corrections uses a system of double second pulses. The first through the eighth second pulse, when marked by a double pulse, will indicate a "plus": correction, and from the ninth through the fifteenth a "minus" correction. The amount of correction is determined by counting the number of second pulses which are doubled. For example, if the first, second and third second pulses are doubled, the UTI correction is 0.3 seconds. Or if the ninth, tenth, eleventh, twelfth, thirteenth and fourteenth second pulses are doubled, the UTI correction is "minus" 0.6 seconds. The UTI correction is also encoded in the IRIG-H BCD code.

Standard Audio Frequencies

Standard audio frequencies of 440Hz, 500Hz and 600Hz are broadcast by the two stations. The duration of each transmitted tone is approximately 45 seconds. A 600Hz tone is broadcast by WWV during odd minutes and during even minutes by WWVH. A

500Hz tone is broadcast during alternate periods unless voice announcements or silent periods are scheduled. The 440Hz tone is broadcast beginning one minute after the hour at WWVH and two minutes after the hour at WWV. The 440Hz tone is omitted during the first hour of the UTC day to act as a day marker.

No audio tones or special announcements are broadcast during a semi-silent period from either station. The periods are from 45 to 50 minutes after the hour from WWV and from 15 minutes to 20 minutes after the hour at WWVH.

The 29th and 59th seconds are omitted in each minute. Each pulse is preceeded by 10 milliseconds of silence and followed by 25 milliseconds of silence.

Propagation and Geophysical Forecasts

A broadcast of radio propagation conditions and solar activity is broadcast in voice during part of every eighteenth minute of each hour from WWV. The announcements are short term forecasts, updated as required, every six hours if needed. Those operators particularly interested should consult *QST*, January 1975, page 84, for specific details.

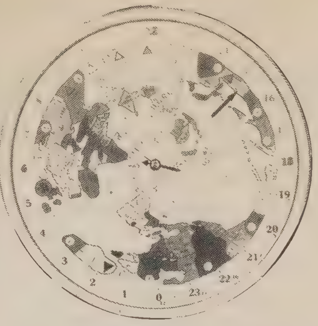
VNG

The Australian time and frequency station VNG is operating again, now from Sydney NSW, and is run by a voluntary users' group using a surplus transmitter operating on 5, 10 and 15MHz. The users' group has thus far been unsuccessful in regaining the VNG frequencies of 4.5, 7.5 and 12MHz which were lost when the original Overseas Telecommunication Commission station at Lyndhurst, Victoria, was closed.

Tribute to L. Spackman

This year Len Spackman ZL1AC bows out as author of the Standard Frequency Transmissions section of the *Call Book*. It is a pleasure to acknowledge Len's long-standing contribution.

A.C. Corney, Group Manager (Applied Physics) Physics and Engineering Laboratory, DSIR.



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Frequencies Available For Use In The Citizen Radio Service Are As Follows

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	26.330	21	26.580
2	26.340	22	26.590
3	26.350	23	26.620
4	26.370	24	26.600
5	26.380	25	26.610
6	26.390	26	26.630
7	26.400	27	26.640
8	26.420	28	26.650
9	26.430	29	26.660
10	26.440	30	26.670
11	26.450	31	26.680
12	26.470	32	26.690
13	26.480	33	26.700
14	26.490	34	26.710
*15	26.500	35	26.720
16	26.520	36	26.730
17	26.530	37	26.740
18	26.540	38	26.750
19	26.550	†39	26.760
20	26.570	†40	26.770

* Channel 15 (26.500 MHz) is to be used solely for calling distress and safety. Full carrier emissions (A3E or H3E) are to be used on this channel.

SSB and DSB usage is to be separated, with SSB being used from Channel 26 (26.630 MHz) upwards.

†Channels 39 (26.760 MHz) and 40 (26.770 MHz) are shared with other services and users can expect interference from time to time.

To reduce interference between the new channel assignments and seven old assignments, it is necessary that usage of the following frequencies cease by 31 March 1989:

26.425 MHz (Previous Channel 1)
26.475 MHz (Previous Channel 3)
26.525 MHz (Previous Channel 5)
26.575 MHz (Previous Channel 7)
26.625 MHz (Previous Channel 9)
26.675 MHz (Previous Channel 11)
26.725 MHz (Previous Channel 13)

Licensees are required to have crystals for these frequencies removed and/or replaced by 31 March 1989.

FOR FURTHER INFORMATION OBTAIN A COPY OF THE "CITIZEN RADIO SERVICE" BROCHURE FROM THE RADIO FREQUENCY SERVICE.

VHF Marine Repeaters

Licensee	Ch	Location	Grid Reference
North Island:			
Far North Repeater Association	60	Mt Camel	N6/615054
Bay of Islands Marine Radio Association	63	Russell Heights	N11/642525
Whangarei VHF Marine Repeater Association	64	Parua Bay	N20/927939
Telecom Networks and International	60	Quinns Road	N42/105488
	62	Deadman's Point	N43/934592
Auckland Volunteer Coast Guard Association	65	* North Moehau	N35/863016
	88	Trig M2	N35/876001
	86	* Auckland	N42/280590
Opito VHF Marine Radio Users Association	61	Opito Bay	N40/302753
	84	Opito Bay	N40/302753
Rotorua VHF Marine Association Inc	64	Whakaungakau	N76/846088
Tauranga Volunteer Coast Guard Association	62	Mayor Island	N58/737084
Lake Taupo VHF Mariners Association	61	Karangahape Cliffs	N102/285245
Whakatane Coast Guard Association	60	Whakatane Heads	N69/453268
Waihau Bay Volunteer Coast Guard	63	Cape Runaway	N62/407726
East Cape Volunteer Coast Guard	61	* Tawhiti	N81/734079
Gisborne-Tatapouri Sports Fishing Club	60	Tatapouri Hill	N98/515385
Mahia SMCRA	63	Mahia	N117/317808
Napier Radio Communication Association Inc	62	Kahuranaki	N141/286022
Telecom Networks and International	61	Mt Rewa	N163/468452
Port Nicholson Association Radio	62	Mt Kaukau	N164/338283
Taranaki Volunteer Coast Guard Association	61	Plymouth Track Mt Egmont	N108/611751
Manukau Volunteer Coast Guard Inc	63	* South Manukau Head	N46/085362
	63	† Lookout Drive	N42/152464
South Island:			
Mount Campbell/Nelson Marine Radio Association	60	Mt Campbell	S13/242482
Marlborough Marine Radio Association	63	Kahikatea	S22/400282
	65	* Kaimua	S15/134382
Lyttelton Maritime VHF Association	63	Herbert Peak	S84/095368
	60	Blue Duck	S42/068155
Timaru Maritime VHF Association	61	Mt Studholme	S118/489217
Otago Maritime VHF Association	62	Hautai Hill	S164/348825
Southland Maritime VHF Users Association	61	Bluff Hill	S182/355765
Westland Maritime VHF Association	63	Paparoa	S44/858937

* Channel has been assigned but station is not yet in service.
†Temporary service being provided until permanent station can be established.

Chl 16 (156.8 MHz)—The international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service.

All ships licensed for operation in the authorised bands between 156 MHz and 174 MHz must be able to transmit and receive on this frequency.

Chl 6 (156.3 MHz) and Chl 8 (156.4 MHz)—For intership working. As with Chl 16 all vessels must fit Chl 6 with Chl 8 optional.

Chl 12 (156.6 MHz) and Chl 14 (156.7 MHz)—For communication with coast stations on port operation matters.

Chl 9 (156.450 MHz), Chl 10 (156.500 MHz, Chl 11 (156.550 MHz) and Chl 13 (156.650 MHz)—For communicaton with Harbour Authorities on port operation and ship movement matters.

Chl 60 (156.025/160.625 MHz),
Chl 61 (156.075/160.675 MHz),
Chl 62 (156.125/160.725 MHz),
Chl 63 (156.175/160.775 MHz),
Chl 64 (156.225/160.825 MHz) and
Chl 65 (156.275/160.875 MHz)—Two frequency talk-through repeater channels.

Chl 68 (156.425 MHz)—For use nationally by 'rescue' organisations. Also for communication with Wellington Radio.

Chl 71 (156.575 MHz) and Chl 74 (156.725 MHz)—For working between coast stations and ship stations after communication has been established on Chl 16.

Chl 77 (156.875 MHz)—Is available for aquatic events.

Chl 88(157.425/162.025 MHz)—Repeater channel for SAR communications.

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Radio New Zealand Short Wave Service

A new 100kW transmitter was commissioned at Rangitaiki (just north of the Napier-Taupo road) on 24 January 1990. The transmitter is located at grid reference NZMS 1 N103/885185 or NZMS 260 U18/077566. It feeds two 8-dipole curtain arrays hung between three 70m guyed masts and directed to the Eastern and Western Pacific Islands. The antennas can be used separately or in combination to serve from French Polynesia to Papua-New Guinea. They operate from 9MHz to 18MHz with a gain of approximately 18 to 20dB, giving an effective radiated power of up to 10MW. We hope to install two additional antennas which will operate from 6MHz to 9MHz in a few years time when the sunspot numbers drop.

The 100kW transmitter is a French Thompson CSF unit which employs the latest high efficiency technology, including dynamic amplitude carrier modulation, provision for single sideband operation and remotely controlled automatic tuning and switching. It uses two TH581 hypervaportron (vapour cooled) tubes (RF amplifier and modulator) with a lower powered RF driver tube. The remaining amplifiers and rectifiers etc are solid state.

The variable input and output capacitances and inductances of the final RF amplifier tube are water cooled and the DC voltage across the RF amplifier and modulator is approximately 28kV. The station is unmanned and operated from Radio New Zealand's master control room in Wellington. Maintenance is carried out by the BCL transmission team based at Paengaroa near Te Puke.

The station at present operates on 17680kHz to Polynesia and the Eastern Pacific from 1700 to 1900 UTC, and from 0330 to 0930 UTC; to Melanesia and the Western Pacific on 17680kHz from 1905 to 2100 UTC and from 0630 to 0930 UTC, and a general service to both areas on 17680kHz from 2100 to 2400 UTC. This schedule is temporary and is generally changed quarterly. Alternative frequencies which may be used are 15485kHz, 17730kHz and 9850kHz.

So far we have excellent reception reports from all around the world and particularly from the Pacific Islands.

The old faithful AWA 7.5kW shortwave transmitters at Titahi Bay which have been operating for over 40 years, can now take a well-earned rest!

Television Broadcasting Frequencies

VHF

Channels

Channels 1 to 3 are VHF Low Band (Band I—44 to 68MHz).

Channels 4 to are VHF High Band (Band III—174 to MHz).

Transmission standard conform to CCIR System B (VHF) and System G (UHF), which principally means 625 line PAL colour with 5.5MHz inter-carrier spacing.

Channel Number	Frequency Limits (MHz)	Vision Carrier Frequency (MHz)	Sound
1	44 to 51	42.25	50.75
2	54 to 61	55.25	60.75
3	61 to 68	62.25	67.76
4	174 to 181	175.25	180.75
5	181 to 188	182.25	187.75
6	188 to 195	189.25	194.75
7	195 to 202	196.25	201.75
8	202 to 209	203.25	208.75
9	209 to 216	210.25	215.75
10	216 to 223	217.25	
11	223 to 230	224.25	

Proposed UHF Channels

	MHz		MHz
E24	494–502	44	652–662
25	502–510	45	662–670
26	510–518	46	670–678
27	518–526	47	678–686
28	526–534	48	686–694
29	534–542	49	694–702
30	542–550	50	702–710
31	550–558	51	710–718
32	558–566	52	718–726
33	566–574	53	726–734
34	574–582	54	734–742
35	582–590	55	742–750
36	590–598	56	750–758
37	598–606	57	758–766
38	606–614	58	755–774
40	622–630	59	774–782
41	630–638	60	782–790
42	638–646	61	790–798
43	646–654	62	798–806
44	654–662		

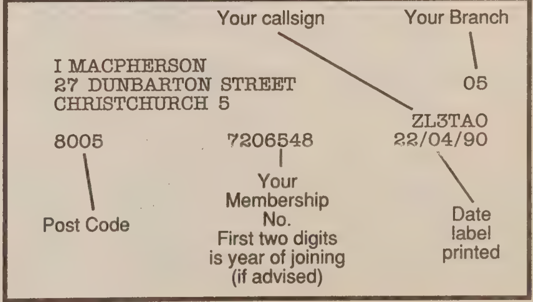
The vision carrier is always 1.25MHz above the lower channel edge (eg, 511.25 in the case of E26) and the analogue sound carrier is always 1.25MHz below the top edge (eg, 516.75 in the case of E26).

Television Frequency Plan

Transmission Site	Coverage Area	Channels/ Polarization
Horokaka	Lower Northland	5, 11, 9 H
Parahaki	Whangarei	4, 2, 7 V
Waiatarua	Auckland	2, 4, 7, H
Te Aroha	Waikato/Bay of Plenty	1, 3, V (TV1, 2 only)
Ruru	Waikato	9 V (TV3)
Kopukairua	Bay of Plenty	7 V (TV3)
Pukepoto	Rotorua	5, 7, 11 H
Putauaki	Eastern Bay of Plenty	6, 8, 2, V
Mt Egmont	Taranaki	6, 8, 10 H
Mt Erin	Hawkes Bay	6, 8, 10 V
Wharite	Manawatu	2, 4, 7 V
Kaukau	Wellington	1, 5, 11 H
Sugarloaf	Canterbury	3, 8, 6 H
Mt Cargill	Coastal Otago	2, 4, 10 H
Hedgehope	Southland	1, 3, 7 H

Note: The notation used, ie 3, 8, 6 H means Channel 3 is used for TV1, Channel 8 for TV2 and Channel 6 is used for TV3, all with antenna horizontally polarized.

BREAK-IN LABELS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Radio Broadcasting Stations

Callsign	Station Name	Location	Frequency	Power kW/ERP	Transmitter Site	Grid Reference NZMS 1	Ant. Height in metres
1ZK	Radio Northland	Kaitaia	1026(S)	2	Waipapakauri	N10/762784	Mast 55
1ZE	Radio Northland	Kaikohe	1215	5	Ohaeawai	N15/383402	Mast 53
1ZN	Radio Northland	Whangarei	1026(S)	5	Otaika	N24/833900	Mast 90
1ZB	News Talk 1ZB	Auckland	1080	10	Henderson	N42/152612	Mast 122
1ZH	Hits & Memories 1ZH	Hamilton	1269	5	Eureka	N56/906584	Mast 98
1ZD	Radio Bay of Plenty	Tauranga	1008	10	Paengaroa	N67/879437	Mast 153
1ZW	Radio Waitomo	Te Kuiti	1170	0.4	Waitomo	N83/649881	Mast 55
1ZO	Radio Forestland	Tokoroa	1413	2	Wiltsdown	N75/276012	Mast 55
1ZU	King Country Radio	Taumarunui	1512	1	Taumarunui	N101/773136	Tower 41
2ZG	Gisborne's Radio 2ZG	Gisborne	945	2	Wainui	N98/438335	Mast 53
2ZC	Bay City Radio	Napier	1278	2	Pakowhai	N134/285307	Tower 41
2ZP	Radio Taranaki	New Plymouth	1053	2	Bell Block	N109/704948	Mast 53
2ZH	Radio Taranaki	Hawera	1557	2	Normanby	N129/850350	Tower 41
2ZW	River City Radio	Wanganui	1197	2	Kaitoke	N138/616824	Mast 55
2ZA	Radio 2ZA	Palmerston North	927	2	Kairanga	N149/063366	Mast 53
2ZD	Radio Wairarapa	Masterton	846	2	Waingawa	N158/079613	Mast 55
2ZB	Wellington 2ZB	Wellington	1035	20	Titahi Bay	N160/403453	Mast 122
2ZE	Radio Marlborough	Blenheim	1539	1	Blenheim	S28/244984	Tower 41
2ZF	Radio Marlborough	Picton	1584	0.4	Picton	S22/303216	Tower 41
2ZN	Radio Nelson	Nelson	1341	2	Stoke	S20/570227	Mast 53
2ZT	Radio Nelson	Takaka	1269	0.4	Motupipi	S8/236834	Mast 45
3ZA	Radio Scenicland	Greymouth	747	2	Kumara	S51/680728	Mast 122
3ZR	Radio Scenicland	Reefton	1521	0.2	Reefton	S83/350279	Tower 61
3ZW	Radio Scenicland	Westport	1287	2	Cape Foulwind	S23/968731	Tower 41
3ZB	Christchurch 3ZB	Christchurch	1098	5	Ouruhia	S76/035665	Mast 137
3ZE	Ashburton 3ZE	Ashburton	873	1	Winchmore	S92/180239	Mast 90
3ZC	Radio Caroline	Timaru	1152	5	Fairview	S111/690511	Mast 90
3ZO	Radio Caroline	Twizel	1485	0.1	Twizel	S109/769687	Mast 28
4ZW	Radio Waitaki	Oamaru	1395	2	Weston	S136/508695	Mast 55
4ZB	Dunedin 4ZB	Dunedin	1044	10	Highcliff	S164/227705	Mast 122
4ZG	Hokonui Radio	Gore	558	5	Dacre	S177/575134	Mast 98
4ZA	Southland's 4ZA	Invercargill	864	10	Dacre	S177/575134	Mast 98
4ZF	Southland's 4ZA	Te Anau	612	0.4	Te Anau	S149/761103	Mast 55
1GEY-FM	Radio Geyserland	Rotorua	97.5	0.4	Pukepoto	N76/813048	Tower 33
1GEY-FM	Radio Geyserland	South Rotorua	90.9	0.2	Paeroa Range	N85/724747	Tower 22
1TPO-FM	Radio Lakeland	Taupo	96.7	0.6	Tuhingamata	N94/472350	Tower 61
1TPO-FM	Radio Lakeland	Lake Taupo	92.4	0.2	Karangahape	N102/285245	Tower 30
2ZK-FM	Ninety-six FM	Hastings	95.9	3.0	Mt Erin	N141/257090	Tower 50
2ZK-FM	Ninety-six FM	Wairoa	99.7	0.04	Awamate Road	N115/772000	Pole 10
1YK	National Radio	Kaitaia	837(S)	2	Waipapakauri	N10/762784	Mast 55
1YE	National Radio	Kaikohe	981	2	Ohaeawai	N15/383402	Mast 53
1YX	National Radio	Northland	837(S)	2	Otaika	N24/833900	Mast 90
1YA	National Radio	Auckland	756	20	Henderson	N42/151606	Mast 153
1YW	National Radio	Waikato	1143	2	Eureka	N56/906584	Mast 98
1YZ	National Radio	Bay of Plenty	819	10	Paengaroa	N67/879437	Mast 153
1YT	National Radio	Taupo	1494	2	Taupo	N94/546396	Mast 53
2YW	National Radio	Gisborne	1314	2	Wainui	N98/438335	Mast 53
2YZ	National Radio	Hawkes Bay	630	20	Opapa	N141/411021	2 Mast 88
2YP	National Radio	Taranaki	1530	2	Bell Block	N109/704948	Mast 53
2YM	National Radio	Manawatu	1449	2	Kairanga	N149/063360	Mast 53
2YA	National Radio	Wellington	567	50	Titahi Bay	N160/397450	Mast 220
2YX	National Radio	Nelson	1116	2	Stoke	S20/570227	Mast 53
3YZ	National Radio	Westland	918	10	Kumara	S51/680728	Mast 122
3YW	National Radio	Buller	1458	0.4	Cape Foulwind	S23/968731	Tower 41
3YA	National Radio	Canterbury	675	20	Gebbies Pass	S84/009363	2 Tower 91
4YA	National Radio	Otago	810	20	Highcliff	S164/232703	Mast 153
4YW	National Radio	Alexandra	639	2	Alexandra	S133/187555	Mast 107
4YQ	National Radio	Queenstown	1134	2	Queenstown	S132/569684	Tower 41
4YZ	National Radio	Southland	720	10	Dacre	S177/575134	Mast 98
1YC	AM Network	Auckland	882	10	Henderson	N42/151606	Mast 153
2YC	AM Network	Wellington	657	50	Titahi Bay	N160/397450	Mast 220
3YC	AM Network	Canterbury	963	10	Gebbies Pass	S84/012361	2 Tower 91
4YC	AM Network	Otago	900	10	Highcliff	S164/232703	Mast 153
2YB	Access Radio	Wellington	783	20	Titahi Bay	N160/403453	Mast 122
1ZM-FM	Auckland	Auckland	97.4	40	Waiatarua	N41/092512	Tower 122
Q90-FM	Taranaki	New Plymouth	90.0	3	Mt Egmont	N119/664635	Tower 43
2MZM-FM	Manawatu	Palmerston North	90.6	40	Wharite	N149/332474	Tower 122
2ZZM-FM	Wellington	Wellington	90.9	40	Kaukau	N164/338283	Tower 122
2ZZM-FM	Wellington	Hutt Valley	93.5	0.6	Towai	N164/480288	Pole 20
3ZM-FM	Canterbury	Christchurch	91.3	40	Sugarloaf	S84/015473	Tower 121

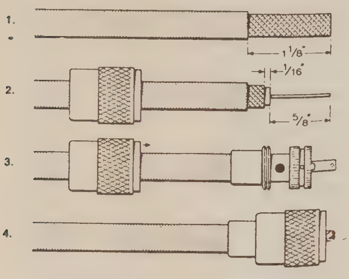
Callsign	Station Name	Location	Frequency	Power kW/ERP	Transmitter Site	Grid Reference NZMS 1	Ant. Height in metres
	Concert Network	Auckland	92.6	40	Waiatarua	N41/092512	Tower 122
1WCP-FM	Concert Network	Waikato/BOP	91.4	40	Te Aroha	N57/234777	Tower 126
	Concert Network	Taupo	98.3	0.2	Tuhingamata	N94/472350	Tower 61
	Concert Network	Taranaki	91.6	3	Mt Egmont	N119/664635	Tower 43
	Concert Network	Hawkes Bay	91.8	3	Mt Erin	N141/257090	Tower 50
	Concert Network	Manawatu	89	40	Wharite	N149/332474	Tower 122
	Concert Network	Wanganui	99	0.1	Mt Jowett	N138/593916	Pole 20
	Concert Network	Wairarapa	99.2	2.5	Otahoua	N162/234598	Tower 52
	Concert Network	Kapiti Coast	98.3	0.6	Forest Heights	N157/632759	Tower
2WCP-FM	Concert Network	Wellington	92.5	40	Kaukau	N164/338283	Tower 122
	Concert Network	Hutt Valley	95.6	0.6	Towai	N164/480288	Pole 20
	Concert Network	Nelson	91.4	3	Grampians	S20/630264	Tower 61
3CCP-FM	Concert Network	Canterbury	89.7	40	Sugarloaf	S84/015473	Tower 121
	Concert Network	Sumner/Redcliffs	99.9	0.8	Southshore	S84/093552	Pole 27
	Concert Network	Banks Peninsula	95.3	0.8	Mt Pearce	S84/266340	Tower 33
	Concert Network	South Canterbury	99.3	3.2	Mt Studholme	S118/489217	Tower 61
	Concert Network	Otago	92.6	25	Mt Cargill	S164/197789	Tower 105
	Concert Network	Dunedin	99	0.25	Highcliff	S164/232703	Mast 153
	Concert Network	Abbotsford	89	0.05	Saddle Hill	S163/027675	Pole 10
1XI	Radio I	Auckland	1332	5	Te Atatu	N042/183617	2 Mast
1XP	Radio Pacific	Auckland	1593	5	Pakuranga	?	Mast
1XW	Radio Pacific Waikato	Hamilton	954	2	Hamilton	N065/851482	Mast
1XX	One Double X	Whakatane	1242(S)	2	Whakatane	?	Mast
1XX	One Double X	Murupara	1242(S)	0.1	Galatea	?	Mast
1XF	Radio Te Arawa	Rotorua	1440	0.2	Tihiotonga	N76/700996	Mast 55
2XR	Ngati Poru	Ruatoria	585	2	Ruatoria	N72/721309	Mast
2XS	2XS-AM	Palmerston North	828	2	Kairanga	N149/053335	Mast
2XX	Radio 2XX Horowhenua	Levin	1377	2	Te Horo	N157/617802	2 Mast
2XW	Radio Windy	Wellington	891	5	Korokoro	N160/410301	Mast
3XA	Radio Avon	Christchurch	1260	2	Marshlands	S076/005623	Mast
4XA	Radio Central	Alexandra	531	2	Alexandra	S134/212509	Mast
4XC	Resort Radio	Queenstown	1539(S)	1	Peninsula Hill	?	Mast
4XE	Resort Radio	Wanaka	1539(S)	0.1	Wanaka	S115/963136	Mast
4XO	Music Radio 4XO	Dunedin	1206	2	Highcliff	S164/216701	Mast
4XI	Radio Foveaux	Invercargill	1224	2	Invercargill	S177/460010	Mast
1XT	Village Radio	Tauranga	1368	0.1	Otemoetai	?	?
2XA	Print Disabled Radio	Levin	1602	2	Levin	?	?
	Mang-O-Nui Ltd	Rotorua	1350	2	Tihiotonga	N76/700996	Mast 55
2YB	Te Upoko I Te Ika	Wellington	783/1161	20/1	Titahi/Mt Vic.	N160/403453	Mast 122
	Radio Rhema	Auckland	1251	5	Henderson	N042/152606	Mast
1XC	Radio Rhema	Tauranga	540(S)	5	Papamoa	N058/810544	?
1XH	Radio Rhema	Hamilton	855	2	Hamilton	N056/815524	Mast
2X?	Radio Rhema	Hawkes/Pov Bay	648	5	Mahia	?	?
	Radio Rhema	New Plymouth	540(S)	2	New Plymouth	N109/843764	?
2XG	Radio Rhema	Wellington	1503(S)	5	Horokiwi	N160/401315	Mast
2XL	Radio Rhema	Nelson	801	1	Richmond	S014/686384	?
3XG	Radio Rhema	Christchurch	1503(S)	2	Marshlands	S076/006612	?
	Radio Rhema	Timaru	594	2	St Andrews	S119/736373	?
4XD	Dunedin Radio 4XD	Dunedin	1305	2	Highcliff	S164/207701	Mast
1KCC-FM	K Double C FM	Kaitaia	91.2	1	Maungataniwha	N10/030630	Tower 52
1KCC-FM	K Double C FM	Kaikohe	89.6	1	Hikurangi	N19/248186	Tower 61
1KCC-FM	K Double C FM	Lower Northland	92.4	1	Horokaka	N24/652787	Tower 49
1KCC-FM	K Double C FM	Whangarei	90.3	0.1	Parahaki	N20/848982	Pole 17
	Radio Hauraki	Auckland	99.0	40	Waiatarua	N41/092512	Tower 122
1STU-FM	Campus Radio BFM	Auckland	91.8	1	Waiatarua	N41/092512	Tower 122
1ROQ-FM	Triple M	Auckland	89.4	40	Waiatarua	N41/092512	Tower 122
1MJK-FM	91 FM	Auckland	91	40	Waiatarua	N41/092512	Tower 122
1KIW-FM	Kiwi FM	Waikato	89.8	40	Te Aroha	N57/234777	Tower 126
1KIW-FM	Kiwi FM	Tauranga	93.4	0.6	Kopukairua	N58/711537	Tower
1WSU-FM	Contact 89 FM	Hamilton	89		Hamilton	?	?
1HOT-FM	Lake City 96 FM	Rotorua	95.9	0.1	Ngongotaha	N76/680070	Pole
1KIS-FM	Taupo's 93.5 KIS FM	Taupo	93.5	0.1	Whakaroa	N93/433401	Pole
	93 FM Hawkes Bay	Hawkes Bay	92.7	3	Mt Erin	N141/257090	Tower 50
2NRG-FM	Energy FM	Taranaki	93.2	3	Mt Egmont	N119/664635	Tower 43
2MMM-FM	Radio Massey	Palmerston North	99.4		Palmerston Nth	N149/108314	?
2XXS-FM	Radio 2XS	Palmerston North	92.2	40	Wharite	N149/332474	Tower 122
89-FM	Radio Active 89-FM	Wellington	89		Tinakori Hill	?	?
2FFF-FM	New Fifeshire FM	Nelson	93	3	Grampians	S20/630264	Tower 61
3RDU-FM	Radio UFM	Christchurch	98.3		Sugarloaf	S84/015473	Tower 121
FMX-FM	C93 FM	Christchurch	92.9	40	Sugarloaf	S84/015473	Tower 121
4SAO-FM	Radio One	Dunedin	91		Mt Cargill	S164/197789	Tower 105
1TRR-FM	Radio Rhema	Taupo	95.1		Whakaroa	N93/433401	Pole
3CCT-FM	Plains FM Comm Acc	Christchurch	96.9	3	Sugarloaf	S84/015473	Tower 121

Coaxial plug assembly

RSGB VHF/UHF Manual

UHF type (soldered screen)—PL259

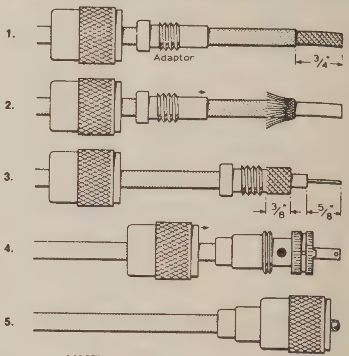
1. Cut end of cable even. Remove vinyl jacket 1 1/8".
2. Bare 5/8" of centre conductor. Trim braided shield. Slide coupling ring on cable. Tin exposed conductor and braid.
3. Screw the plug sub-assembly on cable. Solder assembly to braid through solder holes. Use enough heat to create bond of braid to shell. Solder centre conductor to contact.
4. For final assembly, screw coupling ring on plug sub-assembly.



UHF type (soldered screen)

UHF type (clamped screen)—PL259

1. Cut end of cable even. Remove vinyl jacket 3/4". Slide coupling ring and adaptor on cable.
2. Fan braid slightly and fold back as shown.
3. Position adapter to dimension shown. Press braid down over body of adaptor and trim to 3/8". Bare 5/8" of conductor. Tin exposed centre conductor.
4. Screw plug sub-assembly on adapter, solder braid to shell through solder holes. Use enough heat to create bond of braid to shell. Solder conductor to contact.
5. For final assembly, screw coupling ring on plug sub-assembly.



UHF type (clamped screen)

Computer Interfacing Charts

These charts have been designed to assist in interfacing printers and other peripherals to computer systems.

Code Conversion Table

Printers require control sequences to enable their special features, e.g. to change character sizes. This chart shows all the standard characters together with their various numeric representations. When using BASIC, characters can be represented by a decimal number, e.g. A=CHR$(65). Operating systems, Monitors and Word Processor initialisation often require Hexadecimal (Base 16) numbers. Here A='41. The minicomputer world often uses octal numbers. In this case A="101. This chart also converts numbers up to 255 between the three bases.

The control codes, used for controlling data transmission and peripheral features are given with explanations. They can be generated by using the Control Key and the appropriate upper case character, e.g. <CTRL> G gives the Bell, and <CTRL> M is the same as a carriage return. The ESC character [CHR$(27), Hexadecimal '1B, Octal "033] is often used for enabling command sequences.

Centronics Parallel Interface

This connection system is the most commonly used for printers. The computer sets the eight data lines to the byte required. The Data Strobe line which is normally about +5V is momentarily pulsed to 0V to transfer the character to the printer.

The printer tells the computer when it can send another character by pulsing the Acknowledge line. Alternatively the computer can keep sending characters until the printer sets the Busy line to +5V. Paper empty, select status and Fault conditions can be sensed by the computer using the designated lines.

RS232-C (V24) Simplified

This serial communications system is used extensively by terminals and by some printers. Two way communication requires only one line for data transfer to the computer, and one from the computer. The eight data bits of a character are transmitted sequentially, prefixed by a start bit, and followed sometimes by a parity bit to check for correct transmission, and always by stop bits. The characters are transmitted sequentially in this format. The Baud rate is the number of bits transmitted per second. The control lines carry status information including Busy and Ready between computer and terminal. Seldom are all of them used together. In many applications control lines are not required. The chart correlates the various circuit names used in manuals with the pin number, function, source of the signal and description.

Beacon and repeater Trustees.

Don't forget to inform the FMTAG of any status change.

CODE CONVERSION TABLE

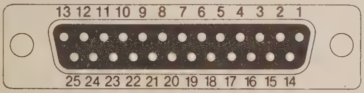
H = Hexadecimal. O = Octal. D = Decimal. CC = Control Code.
C = ASCII Character. (American Standard Code for Information Interchange)

H	O	D	CC	EXPLANATION	H	O	D	C	H	O	D	C	H	O	D	C	H	O	D	H	O	D	H	O	D	H	O	D
00	000	0	NUL	Null	20	040	32		40	100	64	@	60	140	96	'	80	200	128	A0	240	160	C0	300	192	E0	340	224
01	001	1	SOH	Start of Heading	21	041	33	!	41	101	65	A	61	141	97	a	81	201	129	A1	241	161	C1	301	193	E1	341	225
02	002	2	STX	Start of Text	22	042	34	"	42	102	66	B	62	142	98	b	82	202	130	A2	242	162	C2	302	194	E2	342	226
03	003	3	ETX	End of Text	23	043	35	#	43	103	67	C	63	143	99	c	83	203	131	A3	243	163	C3	303	195	E3	343	227
04	004	4	EOT	End Transmission	24	044	36	$	44	104	68	D	64	144	100	d	84	204	132	A4	244	164	C4	304	196	E4	344	228
05	005	5	ENQ	Enquiry	25	045	37	%	45	105	69	E	65	145	101	e	85	205	133	A5	245	165	C5	305	197	E5	345	229
06	006	6	ACK	Acknowledge	26	046	38	&	46	106	70	F	66	146	102	f	86	206	134	A6	246	166	C6	306	198	E6	346	230
07	007	7	BEL	Bell	27	047	39	'	47	107	71	G	67	147	103	g	87	207	135	A7	247	167	C7	307	199	E7	347	231
08	010	8	BS	Backspace	28	050	40	(	48	110	72	H	68	150	104	h	88	210	136	A8	250	168	C8	310	200	E8	350	232
09	011	9	HT	Horizontal Tab	29	051	41	)	49	111	73	I	69	151	105	i	89	211	137	A9	251	169	C9	311	201	E9	351	233
0A	012	10	LF	Line Feed	2A	052	42	*	4A	112	74	J	6A	152	106	j	8A	212	138	AA	252	170	CA	312	202	EA	352	234
0B	013	11	VT	Vertical Tab	2B	053	43	+	4B	113	75	K	6B	153	107	k	8B	213	139	AB	253	171	CB	313	203	EB	353	235
0C	014	12	FF	Form Feed	2C	054	44	'	4C	114	76	L	6C	154	108	l	8C	214	140	AC	254	172	CC	314	204	EC	354	236
0D	015	13	CR	Carriage Return	2D	055	45	-	4D	115	77	M	6D	155	109	m	8D	215	141	AD	255	173	CD	315	205	ED	355	237
0E	016	14	SO	Shift-Out	2E	056	46	.	4E	116	78	N	6E	156	110	n	8E	216	142	AE	256	174	CE	316	206	EE	356	238
0F	017	15	SI	Shift-In	2F	057	47	/	4F	117	79	O	6F	157	111	o	8F	217	143	AF	257	175	CF	317	207	EF	357	239
10	020	16	DLE	Data Link Escape	30	060	48	0	50	120	80	P	70	160	112	p	90	220	144	B0	260	176	D0	320	208	F0	360	240
11	021	17	DC1	X-ON	31	061	49	1	51	121	81	Q	71	161	113	q	91	221	145	B1	261	177	D1	321	209	F1	361	241
12	022	18	DC2	Device Control 2	32	062	50	2	52	122	82	R	72	162	114	r	92	222	146	B2	262	178	D2	322	210	F2	362	242
13	023	19	DC3	X-OFF	33	063	51	3	53	123	83	S	73	163	115	s	93	223	147	B3	263	179	D3	323	211	F3	363	243
14	024	20	DC4	Device Control 4	34	064	52	4	54	124	84	T	74	164	116	t	94	224	148	B4	264	180	D4	324	212	F4	364	244
15	025	21	NAK	Not Acknowledge	35	065	53	5	55	125	85	U	75	165	117	u	95	225	149	B5	265	181	D5	325	213	F5	365	245
16	026	22	SYN	Synchronous Idle	36	066	54	6	56	126	86	V	76	166	118	v	96	226	150	B6	266	182	D6	326	214	F6	366	246
17	027	23	ETB	End Trans. Block	37	067	55	7	57	127	87	W	77	167	119	w	97	227	151	B7	267	183	D7	327	215	F7	367	247
18	030	24	CAN	Cancel	38	070	56	8	58	130	88	X	78	170	120	x	98	230	152	B8	270	184	D8	330	216	F8	370	248
19	031	25	EM	End of Medium	39	071	57	9	59	131	89	Y	79	171	121	y	99	231	153	B9	271	185	D9	331	217	F9	371	249
1A	032	26	SUB	Substitute Char	3A	072	58	:	5A	132	90	Z	7A	172	122	z	9A	232	154	BA	272	186	DA	332	218	FA	372	250
1B	033	27	ESC	Escape	3B	073	59	;	5B	133	91	[	7B	173	123	{	9B	233	155	BB	273	187	DB	333	219	FB	373	251
1C	034	28	FS	File Separator	3C	074	60	<	5C	134	92	\	7C	174	124	|	9C	234	156	BC	274	188	DC	334	220	FC	374	252
1D	035	29	GS	Group Separator	3D	075	61	=	5D	135	93	]	7D	175	125	}	9D	235	157	BD	275	189	DD	335	221	FD	375	253
1E	036	30	RS	Record Separator	3E	076	62	>	5E	136	94	^	7E	176	126	~	9E	236	158	BE	276	190	DE	336	222	FE	376	254
1F	037	31	US	Unit Separator	3F	077	63	?	5F	137	95	_	7F	177	127		9F	237	159	BF	277	191	DF	337	223	FF	377	255

To generate use Control Key <CTRL> with

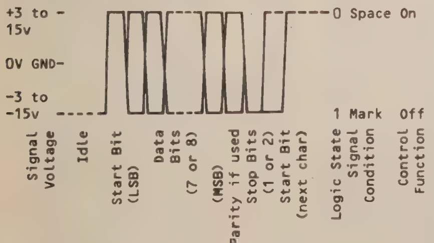
RS 232-C (V24) SIMPLIFIED

25 pin connector using round terminals
View of front of Socket (female connector)



DTE = Data Terminal Eqpt (Printer,Modem port)
DCE = Data Communications Eqpt (Printer port,Modem)

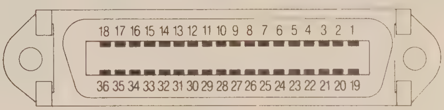
PIN	CIRCUIT		FUNC	SRC	CODE	DESCRIPTION
1	AA	101	Gnd	-	FG	Frame Ground
2	BA	103	Data	DTE	TD	Transmit Data
3	BB	104	Data	DCE	RD	Receive Data
4	CA	105	Cont	DTE	RTS	Ready to Send
5	CB	106	Cont	DCE	CTS	Clear to Send
6	CC	107	Cont	DCE	DSR	Data Set Ready
7	AB	102	Gnd	-	SG	Signal Ground
8	CF	109	Cont	DCE	CD	Carrier Detect
20	CD	108	Cont	DTE	DTR	Data Terminal Ready
21	CG	110	Cont	DCE	SQD	Signal Quality Detect
22	CE	125	Cont	DCE	RI	Ring Indicator
23	CH	111	Cont	DTE	DRS	Data Rate Select



Control signals must be on to allow data transfer

CENTRONICS PARALLEL INTERFACE

36 pin connector using flat contacts.
View of front of socket (female - groove down middle)



PIN	SIGNAL	SRC	PIN	SIGNAL	SRC
1	* Data strobe pulse	Comp	19	Signal ground	-
2	Data bit 1 (LSB)	Comp	20	Signal ground	-
3	Data bit 2	Comp	21	Signal ground	-
4	Data bit 3	Comp	22	Signal ground	-
5	Data bit 4	Comp	23	Signal ground	-
6	Data bit 5	Comp	24	Signal ground	-
7	Data bit 6	Comp	25	Signal ground	-
8	Data bit 7	Comp	26	Signal ground	-
9	Data bit 8 (MSB)	Comp	27	Signal ground	-
10	* Acknowledge pulse	Prt	28	Signal ground	-
11	Busy	Prt	29	Signal ground	-
12	Paper Empty	Prt	30	Signal ground	-
13	Select	Prt	31	* Input prime	Comp
14	Signal ground	-	32	* Fault	Prt
15	No connection	-	33	Signal ground	-
16	Signal ground	-	34	* Ext prime	Comp
17	Chassis ground	-	35	No connection	-
18	+ 5 volts DC	Prt	36	Input busy	Prt

Signals TTL levels: Active +2 to +5V, False +0 to +0.4V
* Inverted signals: Active +0 to +0.4V, False +2 to +5V

Compiled by
CONTROL
MICROCOMPUTERS
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Commonly Used Symbols And Abbreviations

A

A	ampere, amplification factor
AC	alternating current
A/D	analogue-to-digital
AF	audio frequency
afc	automatic frequency control
afsk	audio frequency shift keying
agc	automatic gain control
Ah	ampere hour
alc	automatic load (or level) control
AM	amplitude modulation
a.m.	morning
AMSAT	Radio Amateur Satellite Corporation
AMTOR	Amateur Teleprinting Over Radio
anl	automatic noise limiter
ant	antenna
AOS	acquisition of signal
ARA	Amateur Radio Association
ARC	Amateur Radio Club
AREC	Amateur Radio Emergency Corps
ARS	Amateur Radio Society; Amateur Radio Station
ASCII	American National Standard Code for Information Interchange
ATV	amateur television
avc	automatic volume control
AWG	American wire gauge
az-el	azimuth-elevation

B

B	flux density; susceptance
BASIC	Beginner's All-purpose Symbolic Instruction Code (computer language)
b	byte (a group of bits or binary digits, usually eight)
bc	broadcast
BCD	binary-coded-decimal
BCI	broadcast interference
bcl	broadcast listener
bd	baud (bits/sec)
ber	bit error rate
bit	binary digit
BFO	beat-frequency oscillator
bpf	band pass filter
bw	bandwidth
byte	computer word, 8 bits

C

C	Celsius, capacity, Coulomb
c	velocity of EM waves
CATV	cable television
CB	citizens band
CCIR	International Radio Consultative Committee
CCIT	Consultative Committee for International Telegraph and Telephone (ITU)
CCS	constant current source
cctv	closed circuit television
ccw	coherent CW; counter-clockwise
CD	Civil Defence
Ch	channel
cm	centimetre
CMOS	(or COSMOS)—complimentary-symmetry metaloxide semiconductor
coax	coaxial cable or connector
COR	carrier-operated relay
CPU	central processing unit
CQ	general call to all stations
CRT	cathode-ray tube
ct	centre tap
CTCSS	continuous tone coded squelch system
CW	continuous wave (code); clockwise

D

D	electrostatic displacement; flux density
D/A	digital-to-analogue
dB	decibel
dBd	antenna gain referenced to a dipole
DBDM	double-balance diode mixer
dBi	antenna gain referenced to an isotropic, a dipole has a gain of 2.14 dBi
dBm	decibel referred to 1 milliwatt
dBW	decibel referred to 1 watt
DC	direct current
det	detector
DF	direction finder; direction finding
DIP	dual-in-line package, 14 to 16 pins
dpdt	double-pole double-throw
dpst	double-pole single-throw
dsb	double sideband
DTL	diode-transistor logic
DTMF	dual tone multi-frequency
DVM	digital voltmeter
DX	long distance
DXCC	DX Century Club

E

E	voltage
e	base of Naperian logs
ECL	emitter-coupled logic
ECO	electron-coupled oscillator
EHF	extra high frequency (30-300GHz)
EHT	extra high tension
eirp	effective isotropic radiated power
EMC	electro-magnetic capability
E-M-E	earth-moon-earth (moonbounce)
emf	electromotive force (voltage)
EMI	electro-magnetic interference
EMP	electromagnetic pulse
EPROM	erasable programmable read-only memory
EUV	extreme ultra-violet radiation
EQX	equator crossing
erp	effective radiated power

F

f	frequency
F	farad; Fahrenheit
FAX	facsimile
FCC	Federal Communications Commission
FD	Field Day
FET	field-effect transistor
FF	flip-flop
FM	frequency modulation
FMT	frequency measuring test
FMTAG	Frequency Management Technical and Advisory Group
fot	optimum working frequency
fsd	full scale deflection
FSK	frequency-shift keying

G

g	gram
G	giga (10^9); conductance; magneto motive force
GaAs FET	gallium arsenide field-effect transistor
GDO	grid-dip or gate-dip oscillator
GHz	gigahertz
gnd	ground

H

H	henry; magnetic field strength
HAAT	height above mean terrain
HF	high frequency (3-30 MHz)
HFO	heterodyne-frequency oscillator
hpf	highest possible frequency; high pass filter
HT	high tension
Hz	hertz

I

I	current
IARU	International Amateur Radio Union
IC	integrated circuit
i-d	identification; identifier
ID	inside diameter
IF	intermediate frequency
IMD	inter-modulation distortion
I/O	input/output
IRC	international reply coupon
ISB	independent sideband
ITU	International Telecommunication Union
IW	Intruder Watch (Monitoring Service)

J

J	Joule
j	indicator for reactive component of an impedance; (+j inductive; -j capacitive); joule
JFET	junction field-effect transistor

K

k	kilo (1000)
K	kilobyte; specific inductive capacity; Kelvin; dielectric constant
kg	kilogram
kHz	kilohertz (10^3)
km	kilometre
kV	kilovolt
kW	kilowatt
kWh	kilowatt hour

L

L	self inductance
LC	inductance-capacitance
LCD	liquid crystal display
LED	light-emitting diode
LF	low frequency (30–300kHz)
lhcp	left-hand circular polarisation
LMO	linear master oscillator
LO	local oscillator
loran	long-range navigation
LOS	loss of signal
lp	long periodic; long path
LSB	lower sideband; least signifcant bit
LSI	large-scale integration
LT	low tension
luf	lowest usable frequency
lw	longwave; long wire

M

m	metre (distance or band); milli (10^{-3}); mass
M	mega (10^{6}); mutual inductance
mA	milliampere (one-thousandth of an Amp)
mAH	milliampere hour
MARS	Military Affiliate Radio System
MATV	multi-access television
MF	medium frequency (300–3000kHz)
mH	millihenry
MHz	megahertz (10^{6})
mike; mic	microphone
mini-DIP	dual-in-line package of 8 pins
mi/h	miles per hour
mi/s	miles per second
mix	mixer
mm	millimetre
MO	master oscillator
MOS	metal oxide semiconductor
mod	modulator
modem	modulator/demodulator
MOX	manually operated switching
ms	millisecond
m.s.	meteor scatter
m/s	metres per second
MSB	most significant bit
MSI	medium-scale integration
MSTV	medium-scan television
MUF	maximum usable frequency
MUX	multiplex; multiplexer
mV	millivolt
mW	milliwatt

N

N	modulation factor
n	nano (10^{-9})
nbfm	narrow-band frequency modulation
nbvm	narrow-band voice modulation
n.c.	no connection
NC	normally closed
NF	noise figure
NiCad	nickel cadmium
NL	noise limiter
NMOS	n-channel MOS
NO	normally open
npn	negative-positive-negative
nS	nanosecond
NZART	New Zealand Association of Radio Transmitters

O

OD	outside diameter
OM	old man
op amp	operational amplifier
osc	oscillator
OSCAR	Orbiting Satellite Carrying Amateur Radio
OTC	Old Timers' Club
oz	ounce

P

p	pico (10^{-12})
P	power
PA	power amplifier; public address system
PAM	pulse amplitude modulation
PCB	printed (or etched) circuit board
PCM	pulse code modulation
PEP	peak envelope power
pF	picofarad
ph	phone
PIN	positive intrinsic negative
PIV	peak inverse voltage
pk	peak
pk-pk	peak to peak
PLL	phase-locked loop
PM	phase modulation
p.m.	afternoon/night
PMOS	p-channel MOS
pnp	positive-negative-positive
ppi	plan position indicator (radar)
pot	potentiometer
PROM	programmable read-only memory
PRV	peak reverse voltage
PSK	phase-shift keying
PTO	permeability-tuned oscillator
PTT	push-to-talk
PSU	power supply unit

Q

Q	figure of merit (tuned circuits); charge; quantity
QRP	low power (less than 10 watts input)
QTHR	address correct in Call Book

R

R	resistance
RAM	random access memory
R/C	radio control
R-C	resistor-capacitor
rcvr	receiver
rev/min	revolutions per minute
RF	radio frequency
RFC	radio-frequency choke
RFI	radio-frequency interference
rhcp	right-hand circular polarisation
RI	Radio Inspector
RIT	receiver incremental tuning
RLC	resistor, inductance, capacitor network
rms	root-mean-square
RO	Radio Officer
ROM	read-only memory
rptr	repeater
RS	Radiosport Satellite (USSR)
RSGB	Radio Society of Great Britain
RST	readability-strength-tone
RT	radiotelephone
RTL	resistor-transistor logic
RTTY	radioteletype
Rx	receiver

S

S	second; magnetic reluctance; Siemens
SAE	self-addressed envelope
SASE	stamped SAE
SCR	silicon-controlled rectifier
SHF	super-high frequency (3–30GHz)
SINAD	Ratio of Signal to Noise and Distortion
SM	silver mica (capacitor)
SNR; S/N	signal-to-noise ratio
spdt	single-pole double-throw
spst	single-pole single-throw
SS	sweepstakes; spread spectrum
SSB	single sideband
SSC	AMSAT Phase III special service channels
SSI	small-scale integration
SSTV	slow-scan television
STSP	short-term special purpose (FM repeaters)
SWL	shortwave listener
SWR	standing-wave ratio
sync	synchronous; synchronising
SYNCART	synchronous satellite carrying Amateur Radio Transponder

T

t	time; temperature C
T	period; temperature K
TA	technical adviser
TCA	time of closest approach
TE	trans-equatorial (propagation)
tfc	traffic
THz	tetrahertz (10^{12})
THD	total harmonic distortion
tpi	turns per inch
T-R	transmit-receive
TTL; T^{2}L	transistor-transistor logic
TTY	teletypewriter (from Teletype, the trade mark of Teletype Corporation)
TV	television
TVI	television interference
Tx	transmitter

U

UHF	ultra-high frequency (300–3000 MHz)
UJT	uni-junction transistor
UoSAT	University of Surrey educational/research satellite (Great Britain)
USB	upper sideband
UTC	Universal Co-ordinated Time
uV	ultra-violet light

V

V	volt; voltage
VA	Volt-Ampere
VCO	voltage-controlled oscillator
VCR	video cassette recorder
VCXO	voltage-controlled crystal oscillator
VFBO	variable-frequency beat oscillator
VFO	variable frequency oscillator
VHF	very-high frequency (30–300 MHz)
VLSI	very large scale integration
VOM	volt-ohm-milliammeter
VOX	voice-operated switching
VR	voltage regulator
VSWR	voltage standing-wave ratio
VTVM	vacuum-tube voltmeter
VU	volume unit
VXO	variable crystal oscillator

W

W	watt; work
WAC	Worked All Continents
WARC	World Administrative Radio Conference
WAS	Worked All States
wbfm	wide-band FM
Wh	watt-hours
wpm	words per minute
ww	wire wound; wire wrap
wx	weather

X

X	reactance; electrostatic field strength
xcvr	transceiver
XO	crystal oscillator
xfmr	transformer
xmtr	transmitter
xtal	crystal
XYL	wife

Y

Y	admittance
YF	wife

Z

Z	impedance; UTC time

Conversion Factors (Metric-Imperial)

1 millimetre (mm) = 0.03937 inch
1 centimetre (cm) = 10mm = 0.3937 inch
1 metre (m) = 100cm = 39.37 inches, 3.28 feet, 1.094 yards
1 kilometre (km) = 1000m = 3280.8 feet, 1094 yards, 0.621 miles
1 gram (g) = 1000mg = 0.03574 ounces
1 kilogram (kg) = 1000g = 2.2046 pounds
1 tonne (t) = 1000kg = 0.98 ton, 2204.6 pounds
1 cubic centimetre (cm^3) = 1000mm^3 = 0.6102 cubic inches
1 cubic metre (m^3) = 35.3 cubic feet, 1.3 cubic yards
1 litre (l) = 0.220 imperial gallons, 0.264 US gallons
1 kilopascal (kP) = 0.145 lbs/sq. inch, 0.009867 atmospheres
1 kilojoule (kJ) = 0.948 BTU, 0.239 kilocalories, 737.56ft/lb
1 kilowatt (kW) = 1.34 horsepower, 73.7ft.lb/sec
1 Newton (N) = 0.2248lb force
1 Tesla (T) = 10,000 gauss

Prefixes for Multiples and Sub-multiples of Quantities

Multiple or Sub-multiple	Name	Prefix
10^{12}	Tera	T
10^{9}	Giga-	G
10^{6}	Mega-	M
10^{3}	Kilo-	k
10^{2}	Hecto	h
10	Deca	da
10^{-1}	Deci	d
10^{-2}	Centi-	c
10^{-3}	Milli-	m
10^{-6}	Micro-	µ
10^{-9}	Nano-	n
10^{-12}	Pico-	p

Useful Formulae

- **Wavelength (in metres)**
  Free space=300/f(MHz)
  Half-wave wire dipole=143/f(MHz)
- **Resonant frequency of an LC circuit**
  $f=0.159155/\sqrt{(LC)}$
- **The quality factor or Q of a circuit at resonance is**
  $Q=2\pi f\ L/r$
- **The 3dB bandwidth of such a single tuned circuit**
  B=f(res)/Q
- **Estimate of transformer rating**
  Output=31 A^2 watts
  where A=core cross-section in sq.ins.
  or Output=4.8 A^2 watts if A is in sq.cm.

Ohms Law

$V = IR = W/I = \sqrt{WR}$
$I = V/R = W/V = \sqrt{W/R}$
$R = V/I = V^2/W = W/I^2$
$W = VI = I^2 R = V^2/R$

Mains Plug Wiring

Phase	Brown	Red
Neutral	Blue	Black
Earth	Green/Yellow	Green

Average, Peak, RMS Values

Multiplication factor for sine wave

	Average	RMS	Peak	Peak-Peak
Average	—	1.11	1.57	3.14
RMS	0.9	—	1.414	2.828
Peak	0.637	0.707	—	2.0

Colour Codes

Tantalum Capacitors

Top/Middle band: Value in µF (2 digits)
Middle Spot: Multiplier
Bottom band: Maximum voltage

Colour Code	Value	Multiplier	Voltage
Black	0	1	10.0
Brown	1	×10	1.6
Red	2	×100	0.4
Orange	3	×1k	40.0
Yellow	4	×10k	6.3
Green	5	×100k	16.0
Blue	6		20.0
Violet	7	×0.0001	
Grey	8	×0.01	25.0
White	9	×0.1	2.5

Capacitors

Top band: First digit of value
Second band: Second digit of value (gives value in pF)
Third band: Multiplier
Fourth band: Tolerance—White 10%, Black 20%
Bottom Band: Voltage

Resistors

Bands from closest to lead:

First digit of value
Second digit of value
Multiplier
Tolerance.

Colour Code	Value	Multiplier	Tolerance
Black	0	×1	
Brown	1	×10	1%
Red	2	×100	2%
Orange	3	×1k	
Yellow	4	×10k	
Green	5	×100k	
Blue	6	×1M	
Violet	7	×10M	
Grey	8		
White	9		
Gold			5%
Silver			10%
No band			20%

Notes

1. 1% tolerance resistors have five bands. The first three give three digits of value, the rest as above.
2. Bands are closer to one end of the resistor. Read bands in sequence from this end.

Preferred Number Series

(a) 10% Tolerance E12
10 12 15 18 22 27 33 39 47 56 68 82
(b) 5% Tolerance E24
10 11 12 13 15 16 18 20 22 24 27 30
33 36 39 43 47 51 56 62 68 75 82 91

Constitution

OF THE NEW ZEALAND ASSOCIATION OF RADIO TRANSMITTERS INCORPORATED

1. NAME:

The name of the Society shall be "The New Zealand Association of Radio Transmitters Incorporated".

2. INTERPRETATION:

(a) In this Constitution, if not inconsistent with the context—

"Association" means The New Zealand Association of Radio Transmitters Incorporated.

"Active Amateur" where used in relation to a nomination for the Executive Council means a transmitting member who holds an amateur station licence and who has been actively engaged in transmitting on amateur frequencies during the six month period prior to the date upon which the nomination is submitted.

"Amateur Radio" means all things associated with the Amateur Service, that is to say a radiocommunication service carried on by duly authorised persons interested in radio technique by way of intercommunication and technical investigation solely with a personal aim and without pecuniary interest.

"Branch" means a branch of the Association formed in accordance with this Constitution and which has not been deleted from the Register of Branches or placed in recess by Council.

"Electoral District" means one of the districts for the election of the Executive Council provided for by this Constitution.

"Executive Council" or "Council" means those Officers of the Association who hold office by virtue of a ballot of all members entitled by this Constitution to vote and includes those Officers returned to elective positions unopposed or appointed to fill a casual vacancy.

"National Conference" is an alternative name for the Annual General Meeting of the Association, and where so used (unless the context requires a contrary interpretation) does not include other activities organised or held in conjunction with the Annual General Meeting.

"Officers" means the Executive Council, the General Secretary, the Treasurer, and the persons designated as Appointed Officers by Council under paragraph 18 of this Constitution.

"Official Journal" means the publication designated as such by the Executive Council in terms of paragraph 28 hereof,

"Unfinancial" in relation to a member means a member whose subscription is unpaid after the date on which it falls due.

(b) The provisions of the Acts Interpretation Act 1924 and the recognised rules for the interpretation of written documents generally shall be applied in the interpretation of this Constitution.

Words referring to a novice licence were deleted from the definition of "Active Amateur" by the Annual General Meeting in Whakatane in 1988 consequent upon regulatory provisions making novice licences becoming non-terminating.

3. OBJECTS:

The objects of the Association shall be the maintenance and expansion of the Amateur Service in New Zealand by:

(a) the encouragement of recruits into the Amateur Radio movement

(b) the provision of guidance and instruction in radio technique and operating

(c) the promotion organisation and conduct of activities on a national and a local basis to achieve high standards in the skills involved in Amateur Radio

(d) the publication of an Official Journal

(e) making known the merits of Amateur Radio in the community and nation

(f) representing the interests of Amateur Radio

  (i) with the Administration responsible for radio services, and

  (ii) with other official authorities both national and international controlling conditions for Amateur Radio activities

(g) collaborating with the National Amateur Radio Societies of other countries in the interests of world progress in Amateur Radio

(h) taking any appropriate actions regarding the international regulations of radio, to safeguard Amateur Radio interests

(i) the organising and provision of communication services for the authorities as required

(j) taking such other action which in the opinion of the Executive Council is consistent with these objects.

The word "Government" was deleted from Sub-paragraph (f) (i) by the Annual General Meeting in Whakatane in 1988. A reference to the "New Zealand Post Office" was deleted from Paragraph (i) by the same General Meeting following the repeal by Parliament of the Post Office Act 1959.

4. MEMBERSHIP:

(a) The following rights, together with any other rights conferred by other parts of this constitution shall be the rights of members of the Association.

  (i) to attend without payment or pre-enrolment the Annual General Meeting of the Association,

  (ii) to vote on Association business with the branch of the Association to which they are attached for voting purposes in terms of paragraph 25(g) hereof,

  (iii) to introduce for discussion at an Annual General Meeting of the Association any matter within the objects of the Association,

  (iv) to seek the advice and support of the Association or of the Executive Council on any matter within the objects of the Association,

  (v) to nominate or be nominated for election to the offices of President or membership of the Executive Council,

  (vi) to vote in any election, referendum or ballot.

(b) Membership of the Association shall be divided into the following classes:

  (i) Transmitting Membership

  (ii) Non-transmitting Membership

  (iii) Associate Membership

  (iv) Honorary Membership

  (v) Honorary Life Membership

(c) Transmitting Members shall be members resident in New Zealand who hold a current Amateur Station Licence, including a member holding only a novice licence or qualification. Transmitting Members shall have full membership rights.

(d) Non-transmitting Members shall be members resident in New Zealand who do not hold a current Amateur Station Licence and shall have full membership rights with the exception of the following:

  (i) they shall have no right to hold elective office

  (ii) they shall have no right to vote on any remit to amend this Constitution

  (iii) they shall have no right to vote at a General Meeting or in a referendum on any matter which affects only the rights or special interests of transmitting members.

(e) Associate Members shall be persons who by reason of overseas residence do not qualify as ordinary members. Associate Members (whether or not they hold an Amateur Station Licence) shall have the same membership rights as Non-transmitting members with the following further exceptions:

  (iv) they shall have no vote whatsoever on any matter before a General Meeting or in a referendum,

  (v) they shall have no right to be notified of any General Meeting.

(f) Council may at its discretion and on such conditions as to notification of meetings and participation in postal ballots as it thinks fit either generally or for a particular member, group of members or occasion permit a person to be a transmitting or non-transmitting member notwithstanding overseas residence provided that such a member while resident overseas shall not be eligible to be a member of the Executive Council.

(g) Honorary Members shall for the period of their Honorary Membership have all the privileges of the class of membership to which they would otherwise belong but shall pay no subscription.

(h) Honorary Life Members shall be persons who have rendered valuable or distinguished service to the Association at National level and shall have all the privileges of the class of Membership to which they would otherwise belong but shall pay no subscription.

(i) The General Secretary shall as the circumstances or qualifications of members change, transfer a member from one class of membership to another.

5. ELECTION OR APPOINTMENT TO MEMBERSHIP:

(a) Application for membership shall be made on the form prescribed by Council from time to time, and the form so prescribed shall contain a declaration that if accepted for membership the applicant shall abide by the Constitution of the Association.

(b) As soon as practicable after receiving an application for membership together with the current subscription (or a pro rata proportion thereof for the balance of the subscription year) the General Secretary shall:

(i) provisionally enrol the applicant in the Register of Members, and

(ii) advise Council of the application.

(c) Upon the application receiving the approval of Council the applicant shall be admitted as a member of the Association.

(d) A provisional member shall, pending his admission as a member, be entitled to all the privileges of the class of membership to which he has been admitted except the right to hold office or be nominated for the Executive Council.

(e) If an applicant has previously been refused membership or has been expelled from the Association or if the General Secretary believes there is good reason for so doing then the General Secretary shall action the application in the manner prescribed above but without first enrolling the applicant as a provisional member. Council may at any time prior to the approval of an application direct that an applicant's name be removed from the list of provisional members.

(f) Honorary Members may be appointed by Council for a period not exceeding two years.

(g) Honorary Life Members shall be appointed by a General Meeting of the Association upon the recommendation of Council and shall not be required to pay any subscription.

(h) Any member may resign his membership at any time by notice in writing addressed to the General Secretary at the registered office of the Association, but shall not be entitled to a refund of any subscription paid.

6. FORFEITURE OF MEMBERSHIP:

(a) If a complaint is made to Council in writing that any member of the Association has acted or is acting in a manner contrary to the Constitution of the Association or otherwise in a manner likely to bring Amateur Radio into disrepute, then Council may if it considers there are good grounds for so doing, conduct an enquiry into the conduct of the member.

(b) Any such enquiry shall be conducted by Council at a meeting summoned for that purpose and shall be conducted by such method of procedure as Council may determine.

(c) Before the enquiry is held the member complained of shall be served with notice of the proceedings and shall be given at least one month's notice of the time and place thereof. The notice of time and place shall have annexed a copy of the original complaint and shall state specifically that the matter is being actioned in terms of this section of the Constitution.

(d) Any members whose actions are the subject of such enquiry may appear at the enquiry and may make submissions on his own behalf. He may be represented by Counsel or by another person on his behalf. He may call witnesses to give oral evidence and may submit written representations of reasonable length to Council.

(e) If the member, having been properly notified, fails to appear at the appointed time and place or to make representations or to be represented by Counsel or by some other person, Council may proceed to hear and determine the matter forthwith.

(f) The Association shall not be liable for the expenses of the member in respect of travelling, accommodation, engagement of Counsel, calling any witness or in any other way in connection with the enquiry but Council may at its discretion and without admission of liability by so doing make a grant to the member to cover the whole or any part of his expenses.

(g) Council may at the expense of the Association engage Counsel and call witnesses relating to the matter in question.

(h) If in the opinion of the majority of the Council the member whose conduct is the subject of the enquiry has acted or is acting in a manner contrary to the Constitution of the Association or otherwise in a manner likely to bring Amateur Radio or the Association into disrepute the Council may admonish him or may expel him from the Association.

(i) In all cases where the Council imposes one of the penalties prescribed above, the fact that the penalty has been imposed together with a brief statement of the circumstances, shall be notified to all members either by inclusion in the business of the National Conference or in such other manner as the Council shall decide and in addition Council shall disclose to all members the name of the member upon whom the penalty was imposed unless Council considers there are special reasons why the name of the member should not be so disclosed.

(j) Council may at its discretion delegate the hearing of any complaint to a sub-committee of Council or, alternatively, in special circumstances, of which the Council shall be the judge, to a Commissioner who need not be a member of the Association. It shall be the duty of any sub-committee of Council or of the Commissioner to hear the complaint in the manner described above, and to report to Council and make recommendations as to whether the complaint has been proved and as to the appropriate penalty to impose, but in all such circumstances the final decision as to whether the complaint has been proved and as to the penalty to be imposed shall be taken by the Council.

(k) In the event of any complaint being received against a member of the Executive Council, that member shall not remain present at any meeting of the Executive Council while discussion relating to the complaint takes place, and shall not vote or be included in counting a quorum for any matter in connection with the complaint.

7. SUBSCRIPTION:

(a) Council may levy an annual subscription on members of the Association and may from time to time divide the membership into classes and declare that the different classes of members so divided shall pay only a proportion of the annual subscription.

(b) Council may not more than once each subscription year vary the subscription so levied, but shall not increase the subscription by more than twenty-five per cent without the approval of a majority vote at a General Meeting.

(c) Unless specifically otherwise provided for in this Constitution the division of membership into classes pursuant to sub paragraph (a) above shall be for the purpose only of assessing the subscription payable and shall not in any way otherwise affect the privileges of the class of membership to which any member belongs.

(d) The annual subscription shall fall due on the 1st day of January in each year and any member whose subscription is unpaid on that date shall be unfinancial and shall not be entitled to the privileges of membership. Any member whose subscription remains unpaid after the 31st March in any year shall have his name removed from the Register of Members provided that if the whole of the arrears of subscription are paid and the General Secretary is satisfied that the failure to pay was due to inadvertence or other good cause then that person shall be re-instated to the Register of Members upon application and shall not be required to re-apply for membership.

(e) Council may at its discretion direct that payment of all or any part of the subscription of any member be remitted.

8. NOMINATIONS FOR OFFICE:

(a) Council shall every two years direct that an election be held for the office of President and for the Executive Council and shall not later than the 1st day of September in the year prior to the holding of the election appoint a Returning Officer (who shall not be eligible to be a candidate in the election) who shall have the duty of conducting the election in accordance with this Constitution.

(b) The Returning Officer shall forthwith upon his appointment give notice of his appointment and of the election by publication in the Official Journal and call for nominations for the office of President and for the Executive Council. The Notice of Election shall provide that nominations are to reach the Returning Officer on the 31st day of December in the year prior to the year in which the election is to be held. The Returning Officer shall however treat mail reaching him either by postal delivery or by clearance from a Post Office box on the 1st day of January as having been received in time, but the Returning Officer shall not be required to make more than one postal box clearance on the 1st day of January.

(c) Every nomination shall be in writing and shall be signed by the person nominating and by a seconder and shall be countersigned by the members nominated. The nomination shall also contain a certificate signed by all three parties that the candidate is an active amateur, provided that if a nomination is received without such a certificate, it shall be the duty of the Returning Officer either to obtain such a certificate or to satisfy himself by other means that the candidate is an active amateur before including the candidate in the ballot.

(d) A member may be nominated for both the office of President and Councillor for a district and a member so nominated shall have his name on the ballot paper both for President and for Council. In the event of the member being elected to both offices, he shall be deemed to prefer the office of President and the next successful candidate in the election for Council shall be deemed elected. If there has been no ballot for the election of Council then the President's position on Council shall be filled as a casual vacancy.

(e) In the election for Council only members attached to branches (in the manner provided for in paragraph 25 (d) hereof) within the electoral district for which the election is being held shall be entitled to nominate or be nominated for office or vote in any election.

(f) In the event of Council failing to appoint a Returning Officer for any election year it shall be the duty of the General Secretary to act as Returning Officer and to conduct the election without further appointment or direction than this provision.

9. CONDUCT OF ELECTIONS:

(a) The Returning Officer shall in each election year arrange for the preparation of ballot papers and ballot envelopes which together with such biographical details of candidates as he has received, edited where necessary, shall be posted during the month of February to every financial member entitled to vote at his address shown in the Register of Members.

(b) In the ballot for President the member shall strike out the name or names of the candidate or candidates not voted for leaving on the ballot paper unstruck out, the name of the candidate for whom the member does wish to vote.

(c) In the ballot for Councillors the member shall strike out the names of the candidate or candidates not voted for leaving on the ballot paper, unstruck out, the name or names of the candidates or candidate for whom the member does wish to vote. A member may vote for fewer candidates than there are to be elected.

(d) It shall be the duty of the member to place the completed ballot paper in the ballot envelope addressed to the Returning Office but otherwise unmarked. This envelope in turn shall be placed in a further envelope also addressed to the Returning Officer but bearing the member's name, address and callsign (if any).

(e) Upon being satisfied that the person named in the envelope is entitled to vote, the Returning Officer shall remove the interior envelope and place it in the ballot ensuring always that the envelope is unmarked and that the voter cannot be identified.

(f) The ballot shall close on the 20th March, and all ballot papers shall be posted or otherwise delivered to reach the Returning officer by that date. The Returning Officer shall, however, treat mail reaching him either by postal delivery or by clearance from a Post Office box on the following day as having been received in time, but the Returning Officer shall not be required to make more than one postal box clearance on the day following the closing of the ballot.

(g) The Returning Officer shall appoint two scrutineers (not being candidates in the election) who together with the Returning Officer shall count the votes cast. Should any question arise as to a member's entitlement to vote or as to the propriety of any vote the same shall be determined by the Returning Officer. The Returning Officer's decision shall however not bind any subsequent Inspecting Officer.

(h) After the completion of counting the Returning Officer shall make a written declaration of the result of the election, showing the number of votes cast for each candidate and shall forward a copy of the declaration to the President, the General Secretary and to each candidate and shall arrange publication in the official journal.

(i) In the event of equality of voting, the Returning Officer shall decide by lot in the presence of two scrutineers, which of the candidates is to be returned.

(j) Upon election (except as provided for in Clause 10 (a) hereof) the Executive Council shall hold office from the conclusion of the National Conference following their election until the next Council takes office.

10. ELECTION IRREGULARITIES:

(a) Within fourteen days of the declaration of a result any candidate, Council or a branch, may request an enquiry into the conduct of an election, stating precisely the reasons for seeking any enquiry, whereupon Council, or in the cases of urgency, the President acting alone may appoint an Inspecting Officer to report to Council on the conduct of an election.

(b) The Inspecting Officer shall be a person who was not a candidate in the election and preferably, who has previously held a national elective office in the Association. It shall be the duty of the Inspecting Officer to consider any complaints made and report forthwith in writing to the Council.

(c) Upon receiving the report of the Inspecting Officer Council may—
  (i) annul the result of the election or any section thereof and call new elections giving such directions as to closing time for nominations, etc, as may be necessary, or
  (ii) alter the declaration of the result if satisfied that a clear error has been made, or
  (iii) declare that notwithstanding any irregularities the result of the election has not been affected, and confirm the declaration of the result.

(d) In the event of new elections being called, they shall be held promptly, and the outgoing President and Council shall remain in office until the Returning Officer has declared the result thereof.

(e) Any member of Council whose positions on Council would or might be affected by the report of the Inspecting Officer, shall not be counted in a quorum or be entitled to vote on any motion relating to the adoption of the Inspecting Officer's report, provided that, if the application of this rule would leave the meeting of Council without the quorum prescribed herein for Council business, then all Council members may vote notwithstanding that their positions are so affected.

11. CONTROL OF THE ASSOCIATION:

(a) The business of the Association shall be entrusted to an Executive Council which shall consist of the following:
  (i) The President and a Vice-President chosen in accordance with the provisions of paragraph 17 hereof;
  (ii) The Immediate Past-President (except where the President has been elected for a second term, in which case the office of Immediate Past-President shall not be filled);
  (iii) [Six] Councillors for the [[Northern]] electoral district which shall consist of amateurs belonging to branches having their headquarters located in an area where callsigns beginning with ZL1 are allocated at the time this Constitution comes into force;
  (iv) [Six] Councillors from the [[Central]] electoral district which shall consist of amateurs belonging to branches having their headquarters in an area where callsigns beginning with ZL2 are allocated at the time this Constitution comes into force;
  (v) [Three] Councillors from the [[Midlands]] electoral district which shall consist of amateurs belonging to branches having their headquarters in an area where callsigns beginning with ZL3 are allocated at the time this Constitution comes into force;
  (vi) [Two] Councillors from the [[Southern]] electoral district

which shall consist of amateurs belonging to branches having their headquarters in an area where callsigns beginning with ZL4 are allocated at the time this Constitution comes into force.

(b) Where a member resides in an area to which callsigns with a prefix other than ZL1, ZL2, ZL3 and ZL4 are allocated or an area otherwise having distinctive callsigns that member shall be placed in the electoral district of his choice.

The words in square brackets were inserted in place of the original wording by the 1981 Annual General Meeting in Auckland. The words in double square brackets were inserted in place of the original wording by the 1985 Annual General Meeting at Christchurch.

12. MEETINGS OF THE EXECUTIVE COUNCIL:

(a) The Council of the Association shall meet as often as the business of the Association shall require.

(b) The Executive Council may in addition to meeting in person, conduct its affairs by means of radio-communication on an amateur frequency subject however to the provisions of the Radio Regulations 1970. A meeting convened and held in this manner shall be deemed to be duly convened and held.

(c) Where the Executive Council meets by means of radio-communication a member who for good reason is unable to take part in the meeting may record his views by correspondence. A member of the Executive Council recording his views in this way shall be deemed to have been present at the meeting for the purpose of Clause 12 (f) hereof.

(d) A meeting of the Council may be called by the President or Acting-President (as provided for in paragraph 17 (b) and shall be called upon the written request of three members of the Executive Council. Any such request shall be directed to the President and the President shall call the meeting within seven days to be held in the first instance by radio-communication within fourteen days of the receipt of a written request. The written request shall specify the nature of the business to be conducted at the meeting.

(e) Seven members of the Executive Council present in person or by radio-communication representing at least three different electoral districts shall constitute a quorum.

(f) Any member of Council who is absent from three consecutive meetings of Council without being granted leave of absence shall be deemed to have resigned, and the General Secretary shall forthwith declare a vacancy in Council. Leave of absence may be granted by Council either before or after a proposed absence and in special circumstances after the declaration of a vacancy, in which case the Council member shall be reinstated. In the event of leave of absence being granted after the declaration of a vacancy, Council shall cause a statement of its reasons for granting leave to be announced to the National Conference or in the Official Journal, whichever shall first be practicable.

(g) Where a vacancy has been declared, the Council member who has vacated office shall not be reappointed (unless leave of absence is subsequently granted) before the next Council takes office.

(h) The acts of any member of the Executive Council shall be valid notwithstanding that any defect is afterwards discovered in his election or appointment.

(i) Except where otherwise provided by this Constitution a Councillor or any member may contract with the Association, may vote and be counted in a quorum on any matter in which he has a financial interest provided that he first declares to the Council, either generally in respect of a continuing interest or specifically for a particular case, the nature of that interest. No decision of Council shall, however, be challenged on the grounds that a Councillor so interested has voted in respect of a matter in which he has an interest, if the vote was cast by the member in good faith and through inadvertence.

13. SUB-COMMITTEE OF COUNCIL:

(a) Council may appoint such sub-committees as it deems necessary to assist in its work. All sub-committees shall contain at least one member of Council, and in addition (with the exception of a sub-committee appointed in terms of Clause 6 (j) hereof) the President shall be an ex-officio member of all sub-committees.

(b) All sub-committees shall report to Council and shall forward a copy of all minutes to the General Secretary and to the President. Where practicable and taking into account the expense involved Council members shall also receive a copy of all minutes.

14. PROPERTY OF THE ASSOCIATION AND POWERS OF COUNCIL:

(a) Council shall have control of the funds and assets of the Association and shall have all administrative powers necessary for properly carrying out all the objects of the Association in accordance with this Constitution and which are not specifically reserved to the Association in General Meeting. All other specific powers granted to Council in this Constitution are in augmentation of this general power and shall not be read as restricting it in any way.

(b) Council shall from time to time as it considers necessary authorise expenditure for the furtherance of the objects of the Association.

(c) With the proper approval of the National Conference Council shall have the power to borrow money for the furtherance of the objects of the Association and to secure the payment thereof by the issue of Debentures, or by Mortgage or charge or lien upon the whole or any part of the Association property or assets, both present and future, provided always that Council may, without the prior approval of a National Conference, borrow on overdraft from the Association bankers a sum not exceeding one-fifth of subscription income for the then current year.

(d) Council may invest any funds of the Association not immediately required upon any investments authorised by the law of New Zealand for the investment of trust funds.

(e) Council may purchase, take on lease, exchange, hire or otherwise acquire any real or personal property and any rights or privileges which Council may think necessary for the purpose of any of the objects of the Association.

(f) Council may sell, improve, manage, develop, exchange, lease, dispose of or otherwise deal with all or any part of the Association property.

(g) Where by this Constitution or by any regulations made hereunder the General Secretary or any other officer is empowered to make any decision or exercise any discretion, any decision so made or any discretion so exercised, may be reviewed by Council may substitute its own discretion or decision for that of the General Secretary or Officer.

(h) Where by this Constitution or by any regulations made hereunder Council is required or entitled to exercise a discretion or make any decision on a matter of administration, the exercise of that discretion and the making of that decision may be delegated by Council to any Officer of the Association but reserving always the right of review by Council.

(i) The property of the Association shall be employed solely for the furtherance of the objects of the Association and any profits or surplus arising from the use thereof shall remain the property of the Association.

(j) Any member acting for the Association with the proper authority who incurs expense on the Association's behalf shall be entitled to reimbursement from the Association's property and shall be indemnified to the extent of the Association's property and effects against personal losses except such as happen through his own wilful act or default.

15. BANKING:

(a) The banking of the Association shall be with such banking concerns as may from time to time be directed by Council.

(b) All monies received by or on behalf of the Association shall be paid promptly into an account or accounts and cheques, bills and withdrawal forms drawn on such accounts shall be signed by the President, or a Councillor, or the Treasurer and shall be countersigned by the General Secretary, or by a second Council member appointed by Council for this purpose.

16. VACANCIES ON COUNCIL:

(a) A member of the Executive Council shall be deemed to have vacated his office on the happening of any of the following events:

(i) by the member's death or resignation,

(ii) upon the member being removed from office by a Special General Meeting,
(iii) upon being absent from three meetings of Council in terms of Clause 12 (f) without leave of absence,
(iv) in the event of the member (not being the President or Immediate Past-President) taking up permanent residence in an electoral district other than that for which he was elected provided that this clause shall apply only if the member so takes up residence prior to the 1st day of January in an election year,
(v) in the event of the member leaving New Zealand permanently or for an indefinite period,
(vi) in the event of the Vice-President becoming President whereupon the Vice-President's place on Council shall become vacant.

(b) Any vacancy so created shall be a casual vacancy and the position shall be filled by a member appointed by Council. A member appointed to fill a casual vacancy shall hold office until the next Council takes office. Any Council position not filled at an election shall be deemed a casual vacancy.

(c) A member of the Executive Council may be removed from office only by a two-thirds vote of a Special General Meeting summoned for that purpose. Where Council receives a requisition for a Special General Meeting for the purpose of removing a Councillor, Council may decline to call that meeting if it is within six months of the date upon which a National Conference is due.

(d) In voting whether or not to call a Special General Meeting requisitioned for in terms of this clause, any Councillor, whose position would be affected by the proposed motion, shall not be entitled to vote nor shall that Councillor be included in a quorum.

17. THE VICE PRESIDENT:

(a) Council shall as soon as possible after taking office elect from among its members (excluding the Immediate Past-President unless he also holds an elective position on Council) a Vice-President who shall have generally the duty of assisting the President on an as required basis.

(b) Upon the President leaving New Zealand or being otherwise temporarily unable to carry out his duties, the Vice-President shall become Acting President and while carrying out his duties shall have all the powers vested in the President by this constitution. While Acting President the Vice-President shall retain his position as an elected Councillor and there shall be no vacancy on Council.

(c) In the event of the office of President becoming vacant, the Vice-President shall become President by virtue of this provision without the necessity of any appointment or election. Council shall thereupon appoint a further Vice-President in the manner provided for in paragraph (a) above.

(d) The Vice-President shall become President automatically if after calling nominations no nomination is received for the office of President. The Vice-President shall not, however, be included in any ballot unless he has been properly nominated in terms of Paragraph 8 hereof.

(e) In the event of both the President and Vice-President being absent from New Zealand or otherwise unable to carry out the duties of President, Council shall appoint an Acting President from among its own members.

18. APPOINTED OFFICERS:

(a) Council shall, as soon as possible after taking office, appoint a General Secretary and a Treasurer and shall determine the terms (including remuneration) upon which they shall hold office. It shall be the duty of the General Secretary and Treasurer so appointed to carry out the duties of their respective offices as outlined in this Constitution.

(b) Council may create such offices as it deems fit to assist it in the administration of Association affairs, and may appoint officers to administer those offices whether elected members of the Council or not and may from time to time authorise the payment of honoraria to such officers.

(c) Council may appoint deputies to the various officers who shall have such powers as Council directs. An officer may delegate his duties and powers to his deputy, either generally or for a specific occasion. In the absence of an Officer, a deputy may exercise the powers of the Officer unless council when appointing the deputy, otherwise directs.

(d) Any Officer may choose assistants (who shall not be called deputies) to assist him in his work from time to time. An assistant shall not exercise the powers of the Officer unless he is also appointed a deputy by Council.

19. GENERAL MEETINGS:

(a) There shall be held in each year a National Conference which shall be the Annual General Meeting of the Association. The National Conference shall be held on the Saturday of the weekend of the Sovereign's official birthday observance in the month of June at a venue to be chosen not more than two years in advance by a previous National Conference.

(b) In the event of a special or unforeseen circumstance arising, Council may direct that the National Conference for any year be held at a different venue from the venue so chosen, and may also direct that the Conference be held on a different date, provided that in no circumstances shall the Conference be postponed for any period exceeding three months.

(c) The General Secretary or in his absence or default, any member of the Executive Council shall give notice of venue and place for the Annual General Meeting by publication in the Official Journal at least one clear month prior to the Conference.

(d) In the event of Council altering the venue and/or the date of the National Conference as aforesaid, the General Secretary shall in addition to giving notice in the Official Journal—
(i) advise by registered mail any member of the Executive Council who is not present at the meeting which altered the date and/or venue.
(ii) advise each Branch Secretary by registered mail,
(iii) take such other steps as Council may direct to ensure that all members of the Association are properly notified of the meeting.

(e) A General Meeting shall not be impeached or called into question in any way solely by failure to give notice thereof as aforesaid provided that the failure is caused by accident or inadvertence.

(f) A quorum at any General Meeting shall consist of representation either in person or by delegates or proxy of at least two-thirds of the transmitting members of the Association.

(g) If within two hours of the time appointed for the holding any General Meeting a quorum is not present no meeting shall be held. However, in the case of an Annual General Meeting the members present or represented shall constitute a quorum for an adjournment to a further time and date.

(h) It shall be the duty of the President or, in his absence, the Vice-President to act as Chairman at all General Meetings. In the event of the absence from a meeting of both the President and Vice-President the meeting shall elect its own Chairman.

20. ATTENDANCE AT GENERAL MEETINGS:

(a) General Meetings of the Association shall consist of the following persons:
(i) the Executive Council and such additional Officers as the Executive Council requires to attend,
(ii) Delegates representing each branch of the Association,
(iii) any individual members of the Association who wish to be present in person rather than be represented by their branch delegate or proxy.

(b) Each branch of the Association will, prior to any General Meeting, call a meeting at which all members of the Association attached to that branch for voting purposes shall be entitled to attend. The branch shall at that meeting from among the members of the Association attached to it for voting purposes, select not more than two delegates to represent the branch at the General Meeting.

(c) A branch which is unable to be represented by one of its own members may appoint a proxy who shall be a financial member of the Association. A branch may also appoint the General Secretary to be a proxy, and the General Secretary may, at his discretion, in turn appoint some other person (being a financial member of the Association) to represent the branch at the General Meeting.

(d) At the same meeting all remits shall be discussed and voted upon and the delegates shall, unless given discretion, be charged with casting the branch vote at National Conference in proportion to the voting, (whether for, against or abstaining) at branch level.

21. VOTING AT NATIONAL CONFERENCE AND SPECIAL GENERAL MEETINGS:

(a) Voting on any remit or other motion at a National Conference shall be conducted in any one of the following ways at the discretion of the Chairman—
  (i) by voice,
  (ii) by show of hands,
  (iii) by actual count of votes.

(b) The declaration of a result by the Chairman shall be final and shall be accepted by all members as conclusive of the result of the votes and the fact that it has been passed with any necessary majority, provided that if the result is declared on the basis of a vote by voice or by show of hands, any delegate or member may before the meeting proceeds to the next business require the vote to be retaken by a poll of votes.

(c) Unless otherwise specifically required by law or by this Constitution a majority of those present and voting at any General Meeting shall decide any question.

(d) Branch delegates or proxies when voting on any matter before the General Meeting shall be entitled to exercise one vote for every financial member of the Association attached to that branch for voting purposes by the General Secretary, provided that if any member of the branch being present in person indicates to the Chairman prior to the first vote conducted at the meeting, that he wishes to vote in person, that member may do so, and the branch vote shall be reduced accordingly.

(e) The General Secretary shall certify to the General Meeting the number of votes a branch is entitled to exercise and the certificate of the General Secretary to the meeting (whether or not in writing) shall be conclusive.

(f) The vote of a delegate at a General Meeting shall be conclusive and shall not be impeached or challenged by the meeting or any person thereat upon the ground that the delegate is acting outside the instructions given by his branch.

22. REMITS:

(a) Any—
  (i) branch, or
  (ii) five financial members, or
  (iii) Council, by majority vote,

may bring forward to the National Conference a written notice of motion upon any matter relating to Association policy and such a written notice of motion shall be called a remit. A remit for inclusion in the agenda at National Conference shall be submitted to the General Secretary not later than the 31st day of December, unless Council at its discretion agrees to receive such a remit at a later date.

(b) A remit may, however, be amended at the National Conference provided that the amendment does not change the substance of the remit and provided further that any regulations relating to the manner in which an amendment is to be presented have been complied with.

(c) A remit shall be notified in the Official Journal and shall thereupon be placed on the order paper for National Conference. It shall be debated forthwith without being seconded. The Chairman shall allow the remit to be fully debated taking into account the time available and shall not accept any formal motion which would unreasonably shorten the debate. The Chairman of the meeting may, nonetheless, place a time limit upon discussion and retain a discretion to put the vote when in his view it has been amply debated.

(d) It shall be the duty of the General Secretary to notify Council of all remits received, and Council may, where appropriate, adopt remits (other than remits amending the Constitution) forthwith without waiting for the National Conference.

(e) After the voting on remits Council shall as soon as practicable consider each remit, which has been passed by the National Conference, and shall consider how best it is to be put into effect and shall consider further whether any Association statement of current policy needs amendment as a result of the remit. Where appropriate, Council members or Officers shall be appointed to follow up the remit. The General Secretary or some other person appointed by Council shall report to the branch or members who have proposed the remit, of the action taken by Council and shall keep them informed of follow up action.

23. MODE OF CALLING SPECIAL GENERAL MEETINGS:

(a) A special General Meeting of the Association may be called at any time upon resolution by Council, and it shall be the duty of the General Secretary, or in his absence or default, any member of the Executive Council, to give notice of the venue and place by notice in the Official Journal of the Association at least one month prior to the date for which the meeting is scheduled.

(b) A special General Meeting shall be called upon the written requisition of any two hundred members or upon the written request of any seven branches, and shall be called for a day not earlier than one month or later than three months after receipt of the requisition. The requisition shall state in as precise terms as is practical, the nature of the business to be transacted unless the same shall be placed on the agenda in advance by Council. All business to be transacted shall be stated in the notice calling the meeting.

(c) Notwithstanding the above, Council may in exceptional circumstances of which it shall be the judge, call a special General Meeting giving to members less than one month's notice. In such event, instead of giving notice in the manner set out in paragraph (a) hereof, Council may give directions as to the manner in which notice is to be given to members and in such event shall ensure as a minimum that:
  (i) all Council members are notified of the meeting whether by letter or telephone call,
  (ii) that all branch secretaries are personally notified whether by personal communication, letter to their last known official branch address or by telephone call.

(d) A special General Meeting called with less than one month's notice shall have no power to amend this Constitution.

24. ALTERATIONS OF CONSTITUTION:

(a) This Constitution may be repealed in whole or in part added to or amended at any National Conference by motion moved and voted upon in the same manner in which a remit is moved and voted upon.

(b) Any such repeal, addition or amendment shall require a sixty percent majority of the National Conference.

(c) A remit proposing altering the Constitution shall be submitted to Council prior to the 1st day of January in the year in which the National Conference, at which it is to be considered, is to be held, unless Council at its discretion agrees to receive such a remit at a later date. Council shall obtain such legal or other advice as it deems prudent, and shall make such advice available to the National Conference when the remit is considered.

(d) A remit amending the Constitution shall be invalid and shall not be put to vote unless it states the actual text of the proposed addition or amendment, and in the case of a repeal, amendment or substitution, specifies the actual words to be repealed, amended or substituted.

(e) A remit amending the Constitution may, however, be amended at the National Conference provided that the amendment does not change the substance of the remit and provided further, that any regulations relating to the manner in which an amendment is to be presented have been complied with.

25. ESTABLISHMENT OF BRANCHES AND MEMBERSHIP:

(a) Council may approve the formation of a branch of the Association at any place within New Zealand upon receipt of an application in writing signed by any five or more ordinary members, who are financial with the Association, requesting that they be recognised as a branch.

(b) In deciding whether or not to approve the application Council shall take into account—

- (i) whether the area or special needs of the applicants are already served by existing branches,
- (ii) whether the granting of the application would significantly weaken any existing branch or branches to the point that their ability to continue functioning as a branch becomes doubtful,
- (iii) such other factors as council in its discretion deems fit.

c) Council may, at its discretion, delete a branch from the Register of Branches or alternatively, direct that it be placed in recess if its membership drops below five members or it appears to have ceased to function as a branch. A branch so placed in recess may be reactivated upon application made in the same manner as for the formation of a new branch.

d) Every member of the Association shall be attached by the General Secretary to a branch of the Association of the member's own choice, within the electoral district in which the member resides, and no member shall be so attached to more than one branch.

e) In special circumstances a member may request to be attached to a branch other than a branch within the electoral district in which the member resides and in such case the General Secretary may at his discretion attach the member to a branch outside the member's electoral district.

f) Upon a member changing his address, the General Secretary shall as appropriate, transfer the member's attachment to another branch.

g) Attachment to a branch by the General Secretary shall not in itself confer membership of that branch upon the member so attached but shall entitle the member to vote with that branch whenever remits are discussed or polls of Association members are conducted at branch level.

26. AFFILIATION:

a) Council may grant to any Society or Club having similar objects to the Association, the status of being an affiliate of the Association. Such an affiliated club shall have the following rights:
- (i) to describe itself as being affiliated to the Association,
- (ii) to seek the advice and support of the Association or of the Executive Council on any matter within the objects of the Association.

b) In granting affiliation, Council may by regulation or resolution make the affiliation subject to such other conditions or restrictions as it thinks fit.

27. CONDUCT OF BRANCH AFFAIRS:

a) Every branch shall have a Constitution or a set of rules the terms of which shall be subject to the approval of Council and which shall not be inconsistent with this Constitution.

b) A branch may remain unincorporated, but where practicable, branches shall incorporate either under the Incorporated Societies Act 1908, or the Incorporated Societies Amendment Act 1920, provided always that the Association shall accept no liability for the actions of a branch whether incorporated or not.

(c) A branch may, by its Constitution, provide separately for the admission of its own members and the levying of a subscription additional to the Association subscription, but shall not admit to membership any persons who hold an Amateur Operators Certificate, unless they are also members of the Association.

(d) A branch may publish a newsletter, but shall take care not to compete with the Official Journal.

(e) Every branch shall be required to register an official branch address with the General Secretary, and all notices and circulars shall (unless otherwise expressly provided in this Constitution) be sufficiently addressed if they are posted by ordinary pre-paid mail to that address. Branches shall keep the address as permanent as practicable.

28. OFFICIAL JOURNAL:

(a) Council shall publish or cause to be published an Official Journal to be known by such name as Council or the National Conference shall direct. The frequency of publication and other conditions of publication shall be as are from time to time determined by resolution of the Executive Council.

(b) Council shall appoint an Editor, who shall observe the Editorial policy laid down by Council and shall be responsible to Council.

(c) Every member shall be entitled to receive a copy of the Official Journal provided that where more than one member resides in a household, Council may either generally, or in a particular case, allow a reduced subscription for the second and subsequent members resident in the household and direct that only one copy of the Official Journal be forwarded to the household so long as the reduced subscription continues to be paid.

29. REGULATIONS:

(a) Council shall have power to make regulations on matters arising out of this Constitution and regulations so made shall, provided they are not inconsistent with this Constitution or the Incorporated Societies Act 1908, be binding upon all members.

(b) Council may add to, alter, or repeal all regulations so made, provided that unless the nature of the regulation otherwise requires, no regulation shall be binding until fourteen days after promulgation to members by publication in the Official Journal.

30. REFERENDUM:

(a) At the request in writing of any two hundred financial members who shall not all be members of the same district, Council shall submit any matters detailed therein to the members who would be entitled to vote thereon as if the matters were before a General Meeting and shall conduct a poll thereon to take the general opinion of members. The result of the poll shall not be binding upon Council unless the proposal submitted is approved by more than one half of the members.

(b) Council may of its own volition conduct a referendum.

31. INTERPRETATION AND CASES NOT PROVIDED FOR:

(a) Subject to the decision of any Court of competent jurisdiction Council shall be the authority for the interpretation of this Constitution.

(b) In the event of any matter arising for which no provision has been made in this Constitution, or in the event of there being found any conflict of interpretation between the two different parts of this Constitution, Council may by resolution give directions as to the manner in which the matter in question or the conflict is resolved. Any resolution so passed shall, upon notification to members, be binding in all respects as though the same were a regulation.

32. CONTROL AND USE OF THE COMMON SEAL:

The Association shall have a common seal which shall be kept in the custody of the General Secretary for the time being and shall be affixed to any document only by resolution of the Council, and each impression of the seal shall be valid only if attested in writing by any one of the President, Vice-President or the General Secretary, and in addition, by two members of the Council.

34. DUTIES OF THE TREASURER:

(a) It shall be the duty of the Treasurer—
- (i) To receive all monies due to the Association.
- (ii) To pay its accounts.
- (iii) To supervise its book of account.

(b) The Treasurer shall present to the Executive Council a properly audited financial statement and balance sheet within thirty days of the end of the financial year.

(c) The books of account shall be audited each year by an Auditor who is a member of the New Zealand Society of Accountants. An abstract of the accounts together with the Audit Report shall be published annually in the Official Journal.

(d) The Auditor shall be appointed annually by the National Conference after hearing the recommendations of Council, which recommendations shall not be in any way binding upon the National Conference.

(e) Council shall approve the remuneration of the Auditor and may delegate this power of approval to the Treasurer.

35. GENERAL SECRETARY:

(a) It shall be the duty of the General Secretary—
  (i) To act in all things under the direction of the Council.
  (ii) To convene all meetings of the Association and of the Council except as otherwise provided herein.
  (iii) To keep minutes of all meetings.
  (iv) Generally to conduct correspondence upon behalf of the Council.
  (v) To maintain a Register of Members showing the name and address and occupation of each member and the date of his election to membership.
  (vi) To maintain a Register of Branches showing the name of each branch and the address for mailing purposes.
  (vii) To perform such other duties as Council may from time to time direct.

36. NOTIFICATION TO AND SERVICE UPON MEMBERS:

(a) Any notice which by this Constitution or by Regulations made hereunder is required to be served upon a member shall be served either personally or by posting the same to his last known place of address or occupation by prepaid registered post and the same shall be deemed to have been served in the ordinary course of post.

(b) Where by this Constitution notice is to be given to a member it shall be given by posting the same by prepaid mail addressed to the member's last address recorded in the Register of Members.

37. AMATEUR RADIO EMERGENCY CORPS:

(a) Council shall cause to be established by Regulation a sub group to be known as the "Amateur Radio Emergency Corps" which shall, under the direction of Council, be entrusted with achieving Clause 3 (i) of the Objects of the Association.

(b) The Corps so established shall be divided into sections under the control of an Officer Commanding to be appointed by Council. Each section shall be attached to a branch and the Regulations shall provide generally for the mode of attachment. The regulations may also provide for matters which are to be left to the Constitution of an individual branch, provided that nothing shall be included in the Regulations or in any branch Constitution which would impair the operational efficiency of the Corps.

38. WINDING UP OF THE ASSOCIATION:

Upon the winding up of the Association and after payment of all liabilities has been made, the remaining assets shall be disposed of as resolved by special resolution passed at the General Meeting at which the special resolution for winding up is confirmed by transferring those remaining assets to any other Association, Society or Club having similar objects to this Association or any organisation, Charity or trust established exclusively or partly for similar objects.

THESE are the rules marked "A" referred to in the declaration of ARTHUR GEORGE GODFREY of Auckland, declared at Auckland this 11th day of December 1979 before me:
A Solicitor of the Supreme Court of New Zealand.

Rules for Amateur Radio Emergency Corps

New rules for AREC to reflect changed conditions have been under consideration for some time and are now published to take effect on the 1st January 1982. Branches and Section Leaders are asked to study these carefully and confer when necessary with the Officer Commanding.

1. NAME

The name of the corps shall be "Amateur Radio Emergency Corps" in these rules called "the Corps".

2. OBJECTS

The objects of the Corps shall be:

(a) to provide emergency communications in conjunction with other organisations as the situation demands, e.g. Search & Rescue, Civil Defence, New Zealand Police, etc.

(b) to provide a body of trained radio operators who can be made available at short notice.

3. MEMBERSHIP

(a) Any member of the Association may apply to become a member of the Corps and if acceptable to the Section Leader shall be enrolled as a member. A Section Leader shall not enrol persons attached (in terms of Clause 25 (a) of the Association Constitution) to branches other than the branch to which the section is responsible (in accordance with Clause 6 (c) of these rules) unless arrangements have been made with the branch or branches to which the proposed members are attached. This regulation shall not prevent arrangements between Section Leaders for the deployment and interchange of personnel for operational purposes from outside their own sections.

(b) Where a section has among its personnel members from a branch other than the branch to which the section is attached, the Section Leader shall ensure that the other branch or branches on matters affecting the section as a whole are kept informed and are consulted.

(c) A member may resign form the Corps at any time by giving notice to his Section Leader and may also be deleted from the list of members upon ceasing to take part in the activities of the Corps.

(d) Upon enrolling a member or upon a resignation or upon deleting a member from the list of members the Section Leader shall notify the Commanding Officer.

(e) The Commanding Officer shall issue an identification card to each member which card shall be in the form from time to time directed or approved by the Council and which shall remain the property of the Association. The Commanding Officer may require former members of the Corps to surrender their identification cards to him.

(f) In the event of the member of the Association being denied admission to the Corps by a Section Leader that member may ask the Officer Commanding to review the Section Leader's decision and the Officer Commanding may over-rule the Section Leader and direct that that member be admitted as a member of the Corps. If the Officer Commanding confirms the Section Leader's decision then the member may ask Council to further review the Section Leader's decision, and Council after hearing the Officer Commanding may direct that that member be admitted as a member of the Corps. The decision of Council shall be final and shall not be subject to further review.

4. THE OFFICER COMMANDING

(a) The Officer Commanding shall be appointed by Council and shall hold office from the time of his appointment until the conclusion of the next Annual General Meeting of the Association unless the appointment is sooner terminated by Council.

(b) The Officer Commanding shall be directly responsible to Council and shall put into force the policy decided upon by Council.

(c) The Officer Commanding shall have the authority directly to communicate with any branch to which a section is attached in relation to matters affecting the Corps, and may communicate with directly and instruct any Area Officer, Section Leader, or Section Members.

(d) The Officer Commanding shall submit a yearly report on the activities of the Corps to Council.

(e) Council may appoint one or more deputies to the Officer Commanding in accordance with Clause 18(c) of the Constitution.

5. AREA OFFICERS

(a) Council may upon the request of the Officer Commanding appoint an Area Officer who shall have generally the responsibilities outlined in Part 2.2 of the AREC Manual (April 1978 edition) together with such additional responsibilities as Council may approve.

b) The appointment of an Area Officer shall be by letters of appointment from the Officer Commanding the terms of which shall be subject to the approval of Council. The letter of appointment shall clearly define the area and clearly state the duties for which the Area Officer is responsible.

c) The person appointed to be an Area Officer need not be a Section Leader.

d) Once appointed, an Area Officer shall hold office until the appointment is cancelled by the Officer Commanding or by Council.

6. SECTIONS

a) Any branch of the Association may apply to Council to establish a section and Council before dealing with the application shall refer the application to the Officer Commanding for a report.

b) The name of each section shall be "Name of Branch..... Section Amateur Radio Emergency Corps".

c) Each section shall be responsible to a branch for its administration in accordance with these regulations.

d) It shall be the responsibility of each branch to which a section is attached to:

  (i) ensure that the section remains active and at all times ready and (within the limits of branch finance) properly equipped to carry out its duties as directed by the Officer Commanding.

  (ii) ensure that the assets held by the branch for AREC purposes (whether such assets are the property of the branch or of the Association) are fully inventorised and properly maintained by the section.

  (iii) ensure that financial statements for funds held by the branch for AREC purposes are prepared and included in the branch accounts. Where appropriate, or where directed by Council or the Officer Commanding the accounts shall be properly audited.

e) Nothing in this part of these regulations shall enable the branch to intervene in the operational responsibility of the Officer Commanding, the Area Officer, Section Leader (or any person acting for them) while the section is actually engaged in communication for an emergency or an exercise, or preparing for the same.

f) A section which has ceased to be active may be deleted from the Register of Sections by Council upon the recommendation of the Officer Commanding.

7. OFFICERS

a) The officers of a section shall consist of a Section Leader and such deputies and assistants as the Section Leader himself shall choose who shall form a Committee for the section. The Section Leader shall have generally the duties outlined in the AREC Manual, together with such additional duties as the Officer Commanding may direct or which local circumstances require.

b) The Treasurer of the branch to which the section is responsible shall (whether or not he is formally a member of the section) be ex officio the Treasurer of the section.

c) The Section Leader shall be chosen to hold office for a period of one year in any one of the following ways:

  (i) by appointment by the Branch Committee at initial formation.

  (ii) by election by the members of the branch as a whole.

  (iii) by election by the members of the section.

d) The method of choosing the Section Leader shall be determined by the branch by its constitution or by resolution of a branch general meeting. Where a branch makes no provision for choosing a Section Leader, then the Section Leader shall be elected by the members of the section.

e) A Section Leader may be removed from office at any time by a two-thirds majority vote of those present and voting at a special general meeting of the branch to which the section is attached, notwithstanding the manner in which he has been chosen for office.

f) Before passing any such resolution a branch shall give at least thirty days notice to the Officer Commanding and the Section Leader and allow both the Section Leader and the Officer Commanding to address the meeting at which the resolution is to be voted upon.

8. GENERAL MEETINGS

(a) General meetings of a section may be called at any time. The provisions of the branch constitution relating to the manner of calling general meetings for the branch shall be followed as nearly as practical.

(b) General meetings may be held at the same time as and in conjunction with meetings of the branch provided adequate notice of the business to be transacted has been given.

(c) One-third of the members of the section shall constitute a quorum, unless the Officer Commanding directs in a particular case and for a particular meeting that a smaller number shall be sufficient to constitute a quorum.

(d) Where there is doubt as to the proper procedure for calling or conducting a general meeting the Officer Commanding may give directions either generally or in respect of any particular general meeting and a general meeting held in accordance with those directions shall be deemed to have been properly convened and conducted.

9. SPECIAL REGULATIONS

(a) The provisions of these regulations shall apply to all AREC sections provided that a branch may by its constitution or by resolutions provide for different provisions in respect of its section from the provisions outlined in these regulations.

(b) No such special provisions shall come into force until the actual text of the constitution or of the resolution has been approved by council after hearing the views of the Officer Commanding.

(c) The approval of Council to any such special provisions shall not be given unless the operational responsibility of the Officer Commanding in operations and exercises is preserved.

10. SUBSIDISED EQUIPMENT

Where a section obtains a subsidy for the purchase of equipment through an application requiring the approval of the Officer Commanding that equipment shall not be sold, exchanged or otherwise disposed of without the written consent of the Officer Commanding.

11. SAVINGS AND TRANSITIONAL

(a) The Officer Commanding shall forthwith after the coming into force of these regulations supply Council with a schedule of operational sections together with the name of the branch to which the section is attached and all sections so scheduled shall be deemed to have been properly established under these regulations.

(b) All Section Leaders in office at the date these regulations come into force shall be deemed to have been duly elected or appointed to office and shall thereafter conduct their sections in accordance with these regulations.

(c) These regulations shall come into force on the 1st day of January 1982.

12. GENERAL

Sections shall conduct their internal affairs with a minimum of formality but otherwise in accordance with these rules. Should any question of interpretation arise or should any event or circumstances arise for which no provision is made in these rules, the Officer Commanding may give directions in writing, either generally or in the particular case, and such directions shall be binding on the branch and the Section concerned.

REMEMBER

When operating on a repeater—

LEAVE A THREE SECOND BREAK

to check for any priority traffic

AREC Officers

E. Call			Call	Home	Work	Deputy	Call	Home	Work
ZL3EX	**OC AREC**	Don Mackay	ZL3RW	03/383-211	03/667-443				
ZL2EXA	**Secretary AREC**	Jim Meachen	ZL2BHF	04/278-694	04/6190-885				
ZL1EX	**Area Officer ZL2**	Merv Passau	ZL1AKX	09/298-4575					
ZL2EX	**Area Officer ZL2**	Terry Waghorn	ZL2AYY	04/797-853	04/726-947	Jim Meachen	ZL2BHF	04/278-694	04/6190-885
ZL3EXA	**Area Officer ZL3**	Geoff Chapman	ZL3PX	03/851-815	03/639-721	Gareth Bradshaw	ZL3VP	03/332-2406	03/639-797
ZL4EX	**Area Officer ZL4**	Ron Kingston	ZL4MK	024/44-664		Bob Smith	ZL4OC	024/763-941	024/799-799

AREC Section Leaders And Deputies compiled from Branch Directories

E. Call	Section	Section Leader	Call	Home	Work	Deputy Leader	Call	Home	Work
ZL1EA	Auckland	Don Webster	ZL1CY	09/555-554		Tom Glendenning	ZL1AMZ	09/583-053	
ZL1EB	North Shore	Allan Wooller	ZL1AUW	09/444-2423	09/570-5655	R Williamson	ZL1BNE	09/410-6030	
ZL1EC	Hamilton	Steve Carran	ZL2SR	071/555-519	071/555-519	Bruce Cron	ZL1TNG	071/64-889	071/496-020
ZL1ED	Te Awamutu	Allan Brooker	ZL1TMM	07871/7992	07871/5332	Murray Dunwoody	ZL1LZ	07871/6491	
ZL1EE	Taumarunui	Ross Walker	ZL1AAF	0812/56-747	0812/58-139	Ken McCann	ZL1UPX	0812/7441	0746/7441
ZL1EF	Waihi	John Blyde	ZL1CCS	07863/6893		Peter Anderson	ZL1LR	07863/7546	07863/7546
ZL1EG	Northland	Kevin Bell	ZL1ANI	089/4353281	089/484-339	Ross Langridge	ZL1AUC	089/487-173	089/483-659
ZL1EH	Matamata	W Coates	ZL1GQ	0818/7107		John W Rasmussen	ZL1AGA	0818/8269	0818/8058
ZL1EI	Thames	Ken Hayhurst	ZL1ATU	0843/87-330		Lea Bateman	ZL1APF	0843/87-054	
ZL1EJ	Tauranga	Graham Humphrey	ZL1BWB	075/789-643	075/779-127	Roger Prince	ZL1CM	075/63-431	075/63-431
ZL1EK	Western Sub.	Kevin Rutter	ZL1ABP	09/659-838					
ZL1EL	Cambridge	Tony Boyce	ZL1AFV	071/276-107	071/277-358	Des Hamblyn	ZL1HP	071/276-247	
ZL1EM	Eastern B.O.P.	John Herdman	ZL1ANQ	076/87-953	076/86-458	Alan McDonald	ZL1PI	076/87-740	076/88-967
ZL1EN	Franklin	C Shuker	ZL1BOT	085/87-350	09/758-999	Fred Bain	ZL1SP	085/87-684	
ZL1EO	Kawerau	Gary Amstrong	ZL1FY	076/37-278	076/33-436	Barry Liddle	ZL1CAY	076/38-970	076/33-860
ZL1EP	Waitomo	Mick Gannon	ZL1HJ	0813/87-140		Bob Blomfield	ZL1JE	0813/86-264	
*ZL1EQ	Rotorua	Graeme Hunt	ZL1ANH	073/86-852	073/86-852	Peter Anderson	ZL1AHJ	073/86-488	073/81-199
						Murray Parkinson	ZL1BHW	073/84-561	073/479-463
ZL1ER	Tokoroa	G McFarlane	ZL1BEG	0814/65-522		Dick Van Beek	ZL1CDD	081425/771	
ZL1ES	Papakura	Richard Gamble	ZL1BNQ	09/299-6189	09/570-2858	David Karrasch	ZL1TTS	09/298-5271	09/266-5453
ZL1ET	Taupo	John Bowers	ZL1APM	074/89-601		Graham Messenger	ZL1BVO	074/84-162	
ZL1EU	Manukau	G Emmett	ZL1BYD	09/568-490		Dick Kendall	ZL1AQM	09/595-411	09/378-801
ZL1EV	Te Puke	Eric Brown	ZL1IB	075/738-722		Murray R Neno	ZL1ARL	075/420-574	075/737-329
ZL1EW	Rodney	Ralph Sanson	ZL1TBG	09/425-8474	09/425-8059	W Tester	ZL1AHK	09/425-7299	09/425-8837
ZL1EY	Opotiki	John Pederson	ZL1BNJ	076/56-757	076/56-757	W Shultz	ZL1UBA	076/56-289	076/56-289
*ZL1EZ	Dargaville	Les Ward	ZL1BIW	0884/7079		M Bakulich	ZL1BAU	0884/7975	0884/8369
ZL6EA	Far North	Brian Tarlton	ZL1BAY	0889/81-447		Owen Brott	ZL1ALU	0889/80-729	
	Kerikeri					Ian Wilson	ZL1CBD	0887/78-901	0887/78-814
	Kaikohe					Dan Fletcher	ZL1THE	0887/80-609	
ZL6EB	Te Aroha	B McConnochie	ZL1BWK	07/884-8871	07/884-8189	Grant Horn	ZL1UNX	07/884-5720	
ZL6EC	Hibiscus Coast	John Wallace	ZL1OD	0942/40-196		Blair Jackson	ZL1NV	0942/66-664	09/444-5101
ZL6ED	Mangakino								
ZL6EE	Mount Roskill	Ian Talbot	ZL1TSV	09/478-7549	09/478-7549	Irving Spackman	ZL1MO	09/674-886	
ZL2EA	Gisborne	Rowley Haisman	ZL2APH	079/86-422	079/85-089	Rib Compier	ZL2AJQ	079/88-636	
ZL2EB	New Plymouth	Wayne Gaudin	ZL2VN	067/35-800	067/80-989	David Leask	ZL2AYU	067/33-493	067/510-680
						John West	ZL2ADW	067/70-635	067/510-200
ZL2ED	Wanganui	Craig Mills	ZL2MD	064/50-766	064/54-109	Bob Jeffers	ZL2AAQ	064/32-107	064/54-109
ZL2EE	Hastings	Peter Stevens	ZL2AS	070/89-726		Fraser Burns	ZL2TKV	070/82-753	070/89-998
ZL2EF	Kapiti	Len Blackley	ZL2TFP	058/87-048	058/87-048	Jim Randal	ZL2AZZ	058/36-213	058/85-034
ZL7EA	Feilding	G J Hitchman	ZL2BNA	063/35-847		A J Able	ZL2QR	063/36-538	
ZL2EH	Sth Hawkes Bay	A Law	ZL2HE	0653/49-171	0653/46-029	Denis Dawson	ZL2TDA	0650/48-960	0650/48-811
ZL2EI	Manawatu	Dexter Muir	ZL3LH	063/65-475	063/67-104	John Groat	ZL2BOQ	063/75-072	063/79-194
ZL2EJ	Wairarapa	Robin Reeve	ZL2FZ	059/82-211	059/88-000	Jeanette Lambert	ZL2UDV	059/88-213	059/82-270
ZL2EK	Rahotu Coastal					T Clouston	ZL2AQP	0661/8062	
ZL2EL	Upper Hutt	Gavin Smith	ZL2ACT	04/278-533	04/821-506	Geoff Smith	ZL2BDW	04/268-866	04/691-222
ZL2EM	Wellington	Murray Milner	ZL2LB	04/324-739	04/823-333	Wilbert Knol	ZL2BSJ	04/835-264	04/861-029
ZL2EN	Nelson	Andrew MacKie	ZL2THG	054/75-067	054/61-429	Bob Peters	ZL2BFW	054/76-477	054/79-721
ZL2EO	Marlborough	Gordon Buckdon	ZL2BGQ	057/894-64		Roger Lawson	ZL2BHG	057/869-86	057/894-94
ZL2EP	Inglewood	Tarry Martin	ZL2KV	067/67-627		Jack Leitch	ZL2ASL	067/67-421	
*ZL2EQ	Napier	Geoff Clibborn	ZL2CZ	070/446-039	070/448-710	David Syme	ZL2UGG	070/266-376	
ZL2ER	Waimarino	Bill Luscombe	ZL2AVL	0658/56-707		David Inkster	ZL2BLI	0658/58-596	
ZL2ES	Horowhenua	Robin Christie	ZL2ARC	069/83-330	069/87-035	Errol Burnham	ZL2BHH	069/85-970	069/48-795
ZL2ET	Titahi Bay	Brian Amies	ZL2AYF	04/326-378					
ZL2EU	Pahiatua	Paul Johnson	ZL2BNP	0650/8094		G Johnson	ZL2BDZ	0650/681-96	0650/7456
ZL2EV	Patea	Graeme Bateman	ZL2BHD	062/84-793		John Clarkson	ZL1UJX	0623/8576	
ZL2EW	Marton	Cathie Purdie	ZL2ADK	063293/606	063299/730	Ian Miles	ZL2TZW	0652/6310	
ZL2EY	Hutt Valley	Bob Sewell	ZL2ASO	04/646-929		Bernard Wright	ZL2QZ	04/646-433	04/666-969
ZL7EC	Waitara	Jonathan Herbert	ZL2BPW	067/23-441		Anne Griffiths	ZL2BOV	067/23-827	
ZL7ED	Sthn Wairarapa	Stewart Benton	ZL2AQT	0553/89-685	0553/89-685	Selwyn Roberts	ZL2UKR	0553/89-185	
ZL3EA	Christchurch	Geoff Chapman	ZL3PX	03/851-815	03/639-721	Stan Whitfield	ZL3AP	03/358-3089	03/332-6453
ZL3EB	Westland	Kevin O'Sullivan	ZL3ABY	027/7598	027/80-242	Craig Terris	ZL2UAY	027/4087	027/80-336
ZL3EC	Sth Canterbury	Ken Davy	ZL3HG	056/43-822	056/43-822	Phil Bennett	ZL3JM	056/57-573	
ZL3ED	Ashburton	Alan Chapman	ZL1AFI	03/308-7737		Les Vincent	ZL3UX	053/36-306	
ZL3EE	South Westland	Ron Searle	ZL3MY	0228/567-41	0288/567-41	Gary Searle	ZL3DT	0288/560-21	0288/560-21
ZL3EF	Reefton-Buller	John Griffiths	ZL3AFN	0289/8399	0289/7259	Graeme Crase	ZL3ADB		0289/7259
ZL3EG	Nth Canterbury	Anne McMaster	ZL3VR	0327/8278	03/654-401	Lorna Allan	ZL3AAZ	0502/35-352	
ZL3EH	Kaikoura	Bill Jackson	ZL3PZ	03/319-5981		R J Godfrey	ZL3DR	03/319-5558	
ZL4EA	Otago	A Cross	ZL4QK	024/879-619	024/770-803	David Stevenson	ZL4SB	024/878-030	024/878-030
ZL4EB	E. Southland	Dick Whyte	ZL4AQ	020/86-793	020/87-433	Alister Allan	ZL4AO	020/87-288	
ZL4EC	Southland	Neville Checketts	ZL4OX	021/66-599	021/66-599	Mike Cockeram	ZL4IC	021/358-222	021/82-869
ZL4ED	Balclutha	John Lochhead	ZL4QS	0341/39-827	021/66-599	John Blair	ZL4TJO	0341/57-849	0341/57-673
ZL4EE	Central Otago	W Beveridge	ZL4ST	03/448-6880	03/448-8038	Ewen Mason	ZL4TKS	03/444-9240	03/444-9200
ZL4EF	North Otago	D Bokser	ZL4TFF	0297/454-80	0297/47-981	D Walker	ZL4TDF	0297/71-262	
ZL4EG	Queenstown	Russ Watson	ZL4JW	03/442-9374	03/442-8564	P L Brentwood	ZL4GU	03/442-9549	03/442-8564

*No 1990 information supplied.

Official AREC records have also been updated from Branch Directories. Any errors or omissions should be notified to Jim Meachen ZL2BHF immediately

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As each new *Call Book* appears, we at SCE are happy to see the steady increase in the number of licensed Hams in New Zealand. As always we strongly recommend you join NZART, so that you may reap the maximum benefit from your Hobby. As the sole New Zealand distributors of ICOM Communications Equipment, we are proud to be able to supply you with the most up-to-date and innovative gear available today. On the pages of *Break-In* each month, you will find details of the latest and greatest from ICOM, and many other SCE/ICOM lines as of May 1 1990 with prices applying at that date.

Two Meter Equipment

The IC-2SAT series. This is the new standardised form for all of ICOM's Handheld transceivers. Features built in batteries with the option of add on batteries. Up to 5W output with the appropriate battery. 48 memory channels which will store separate offsets, DTMF codes and CTCSS sub-tones. See October 1989 *Break-In* for more details. **$670**

The IC-2GAT series. This Handheld has a big 7W output, 20 memory scanning, DTMF built in, very rugged construction with heaps of other features. See October 1988 *Break-In* for more details and product review. **$660**

Handheld Accessories. We stock a full range of accessories for all of the Handhelds that ICOM are currently manufacturing together with accessories for earlier models. Accessories include Speaker/Microphones, spare Battery Packs of various Ampere/Hour ratings and terminal voltage ratings, DC-DC regulators for models that need them to run off external 12V systems, Leatherette Cases to suit all combinations of Handheld and Battery Case combinations and Headset/Boom-microphones for the later model Handhelds. Sit-in base chargers for rapid battery charging are available for all models.

The IC-228A—Ultra compact 2m mobile, 25W output, 20 memories, scanning, repeater reverse, full duplex or simplex from memory. Coverage 140-160MHz. **$898**

The IC-228H—Same as IC-228A but with 50W output. See August 1988 *Break-In*. **$990**

The IC275H—Now all mode two metre rig, matching style with the IC-735, 32 memories, scanning, built-in optional pre-amp, optional built-in AC power supply. This superb rig has all the goodies and provides 100W output. The very best for satellite and general two metre use—can't beat high power! See July 1988 *Break-In*. **$2380**

Receiving pre-amplifiers—The IC-AG20, built-in pre-amp for the 25W **IC-275A $231.00.** The **IC-AG25,** external pre-amp for the 100W **IC-275H $283.00.** The **IC-AG35,** external pre-amp for the 80W **IC-475H $302.00.**

Two Metre/432 MHz Dual Band Equipment

The IC-32AT—This is the top of the line for ICOM handhelds and sets the way for others to follow. Both band 144/430 with features such as full duplex, 5.5 watts output on both bands, 20 memory channels for either UHF or VHF, rugged construction. See January/February 1989 *Break-In* for more details. **$898**

The IC-24AT series. This top-of-the-line Handheld is the same size as the IC-2SAT series and is capable of a big 5W output with the appropriate battery pack. Some of the standard features are, keyboard as well as tuning control of frequency and DTMF etc, up to 80 memory channels, dual band function display, 24 hour resident clock with alarm features, six different scan functions, and many other features which make this model the most popular dual-band Handheld in the range. **$875**

The IC-3210—Dual band 25W super compact FM Mobile. Covers both two metres and 432MHz FM bands. Built-in duplexer allows one antenna connection to a dual band antenna. Complete with all the usual ICOM features, ten memory channels, four scanning modes—memory, band, program and priority scan—and bright LCD display. See November 1988 *Break-In*. **$1210**

The IC-2400 Dual Band mobile transceiver is the latest in the ICOM range of 45W mobiles. Features dual displays, full duplex operation, simultaneous dual band watch, 40 memory channels, pocket beep function, and many more features. See November 1989 *Break-In* for more details. **$1580**

432 MHz Gear

The IC-4SAT series. Same as the IC-2SAT series but 430-450MHz. **TBA.**

The IC-4GAT series. Same as the IC-2GAT series but 430-450MHz **$695**

Accessories. The same as above under two meter equipment.

The IC-475H—New all-mode 432MHz rig, matching styling with the IC-735. Thirty-two memories, scanning, built-in optional pre-amp, optional built-in AC power supply, a really nice piece of equipment, with a very useful 80W to contribute to your satellite operation, or other 432MHz use—a great high-power 432 rig. See July 1988 *Break-In*. **$2735**

1296 MHz Gear

The IC-120—Another ICOM first! A complete 1296MHz FM transceiver ready to go. Covers 1260–1300MHz in 10kHz or 20kHz steps with 1MHz up/down, six memory channels, 1W output transmit, receive sensitivity less than 0.5µV for 20dB noise quieting, less than 0.3µV for 12dB SINAD. **$1190**

The IC1271A—1296MHz All Mode base station transceiver covering 1240–1300MHz, SSB, CW and FM. A healthy 10W plus RF output, independent transmit and receive frequencies available, 100 Hz digital PPL synthesiser, frequency stability ± .0003% 0°C-50°C, receiver sensitivity SSB and CW, less than .16µV for 10dB S +N/N, FM less than .22µV for 12dB SINAD. **$2702**

The IC-PS25—Built in AC power supply option. **$517**

The IC-AG1200—Mast head pre-amp **$281**

HF Gear

The IC-725—The very best, latest state of the art HF mobile or home base super compact rig. All Hambands transceive 1.8MHz–30MHz, FM, CW, AM, SSB. General coverage receive 0.1–30MHz 100W RF output, 100 per cent duty cycle, speech processor, 26 memory channels, program scan, memory scan plus built-in pre-amp, noise blanker, switchable AGC, 105dB dynamic range, sensitivity SSB and CW 1.6–30MHz less than 0.15µV for 10dB S/N. See March 1989 *Break-In.* **$1980**

The IC-726 HF Transceiver. Same as the IC-725 above but includes the six meter band as well!! See January/February 1990 *Break-In.* **$2400**

The IC-735 HF transceiver. Same size as the IC-725 and IC-726 but fully featured. As standard, full QSK, Noise Blanker, Preamp, VOX, speech Compressor, PBT, Notch filter. All modes including AM and FM, and many other features. **$2585**

The IC-PS55—matching power supply. **$817**

The IC-AT150—Autotuner **$1039.** The **IC-AH3** Autotuner for random wires. **$1062**

The IC-751A—The same matching styling as the new generation IC-275 and IC-475 rigs. Full general coverage receive 100 KHz–30MHz, full Ham Band coverage, the usual convenient three-speed band spread, superb receive sensitivity, built-in pre-amp, 32 memories, scanning, 100W out on SSB, CW, RTTY, FM and has an AM transmit and receive mode with PBT and 9MHz crystal notch filter, high performance speech processor, all-mode squelch, adjustable AGC, noise blanker, and last, but not least, the Icom-developed J-FET DBM gives the receiver a 105dB dynamic range. Supplied complete with FM option, marker and desk microphone and built-in electronic keyer (PS35 built-in supply $420 with set) **$3615**

The IC-765 HF Transceiver. This very advanced HF transceiver comes complete with Automatic Tuner and built-in Power Supply. It is stacked full of features that come standard such as RF Attenuator, IF Shift, Notch Filter, RF Speech Compressor and very effective Noise Blanker. Refer to April 1990 *Break-In* for more details. **$6445**

The IC-781—The ultimate radio for those who want the very best there is to have. No other rig on the market has these features or surpasses it. For more details you must get a detailed brochure to appreciate its quality. Please send today for your brochure. **$11200**

Communications Receivers

The IC-R1. This super small General Coverage receiver has no rivals at all!! It is the same size as the IC-2S series and covers 100kHz to 1300Mhz!! It is a true hand held Scanner in every meaning of the word. Keep an eye on future editions of *Break-In* for more details or write today. **$760**

The IC-R100. This unit is the mobile version of the IC-R1. Super small for easy installation in a car. Ideal for mobile scanning. Keep an eye on future *Break-In*'s for more details or write today. **$1150**

The IC-R71. The commercial grade IC-R71 covers all the HF Ham Bands with full band spread, and yet by selecting the general coverage mode, it covers 100kHz to 30MHz continuous, SSB, CW, AM, RTTY (and FM with the option). It also has a built-in pre-amp and superb sensitivity. Twelve volt DC or 240V AC operation, 32 memory channels and even an infra-red remote tuning option. **$2175**

The IC-R7000—Commercial grade VHF/UHF communications receiver matching the IC-R71, covers 25–1000MHz and 1025–2000MHz (Specs guaranteed 25—1000 and 1260—1300 MHz). General coverage receive SSB, FM wide and narrow, AM and CW, six tuning speeds, 0.1, 1.0, 5, 10, 12.5 or 25kHz, dial lock noise blanker, S-meter, attenuator, optional RC-12 infra-red remote control and optional voice synthesiser. Frequency stability 5 ppm at 10°C—+60°C sensitivity—SSB .3µV or less; AM 1.0V or less; FM .3µV or less. Just great! **$2450**

The IC-R9000—HF—VHF—UHF communications receiver. Complete with spectrum analyser. The tops in receivers. **$8640**

Antennas

HF Beams—

The Creative Design—heavy duty, exceptionally well made HF Beams featuring optimum spaced elements on 14, 21 and 28MHz for optimum gain. See April 1988 *Break-In.*

The CD-318—Four element beam, three full spread elements effective on each band giving, 7, 8 and 8.5dB gain on 14, 21 and 28MHz. **$895**

The CD-318B—Five element beams, four full spaced elements on each band, giving 7.5, 9 and 9.5dB gain on 14, 21 and 28MHz. **$1089**

VHF Antennas

The SCE 2/58G—Two metres, 5/8 mobile whip with gutter grip. **$32**

The SCEH-2CL—Two metres collinear, 3.7dB, has radial hub unit. **$52**

The SCEH-432CL—432MHz collinear 3.7dB and also uses radial hub unit. **$48**

Beams—Two metres, seven element, 8dB, with balun **$127,** Two metre, 11 element, LPY **$147,** 432MHz, seven element, 10dB with balun. **$135**

Rotators

The KR400—HF rotator medium weight for HF beams and very heavy VHF/UHF arrays, 240V **$530,** mast mount for the KR 400 if required. **$45**

The KR500—Elevation rotator for OSCAR antennas. **$570**

The KR600—Heavy duty rotator for the CD-318 and 318B Beams (mast mount if required, $48). **$698**

Antenna Accessories—hard drawn stranded copper wire, 140 feet **$15.90,** imported egg insulators **$2.30,** imported foam coax, RG8U **$5.35** metre, RG8X **$2.52** metre (note RG8U is 2 kW), 470Ω ladder line **$52/100 feet,** six-core rotator cable **$1.60** metre. Baluns 1:1 Bencher $64, also 2kW low filters **$115,** coax switches, two position **$62** four position **$160,** 50Ω PL259 jumper leads, half metre **$7.80,** 1 metre **$7.95.**

Linear Amplifiers

The Icom IC-2KL—All solid-state linear, 160–10m including the new bands, auto band switching with new IC-720A or with the IC-720 when fitted with an LDA unit. Runs 1kW input on SSB and CW. No tune up! Expensive but how convenient. Complete with AC power supply. **$4700**

Power Supplies—SCE power supplies for solid-state rigs—

The SCE-DC25—Heavy duty 13.8V 25A max., regulated supply with twin output terminals.

The SCE-DC8—New, suitable for the new breed of 25 watt, 2 metre FM sets, and will supply up to around 7.5 A max., with 5-6 continuous. An attractive unit finished with the usual SCE black and silver—New Model!

Antenna Tuners

The MFJ-941D—160–10m, up to 300W, tunes coax, random wires, and balanced feeders. SWR/power meter and has rear-mounted, four position antenna switch. $548

The IC-AT100—Fully automatic tuner, auto-bandswitching with the IC-720A and IC-730, IC-740, IC-750. **$1206**

The IC-AT150—Fully automatic antenna tuner for the IC-735 and IC-725. Auto bandswitching, the latest technology. **$1039**

The IC-AT500—As per the AT100 but handles up to 1kW for use with the IC-2KL **$1626**

The IC-MN100—Passive antenna matcher provides less than 1.5 SWR with short dipoles, and random end feed wires from 1.5–30MHz. **$449**

the IC-AH3—Fully automatic tuner for the IC-735 and IC-725, tunes random end fed wires, and/or the IC-AH2B mobile whip. **$1372**

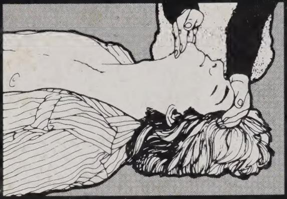
The IC-AH2B—Mobile whip and base unit. **$507**

Speech synthesisers available for the 751, R71, 27A, 27H, 271 and 471 models. **$139**

The very best 73 from your totally Ham licensed staff—Barry ZL1AAA, Roly ZL1BQD, Gail ZL1FV.

Cardiopulmonary Resuscitation (CPR)

AIRWAY

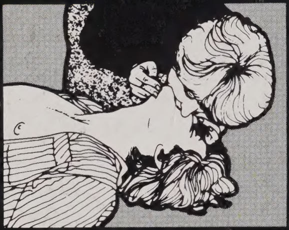


Establish unresponsiveness —
Shake and shout.
Call for help.
Position victim flat on back on firm surface.

OPEN AIRWAY

Tilt head well back.
Lift chin with fingers.

BREATHING



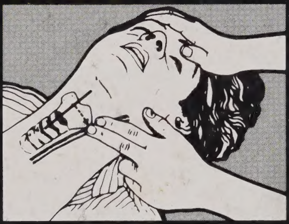
Look, listen and feel for breathing.
If absent,

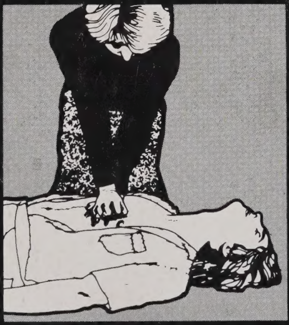
BEGIN RESCUE BREATHING

Keep victim's head tilted back.
Pinch nostrils.

Take deep breath, blow firmly with tight seal over victim's mouth.
Give **two full breaths** initially.
Chest must rise and fall.

CIRCULATION





Check carotid pulse.
Place two fingers on victim's Adam's apple, then slide into groove at its side. If pulse absent,

BEGIN EXTERNAL CARDIAC COMPRESSION

Kneel by patient.
With **heel** of hands, press lower half of breastbone downwards 3.8 – 5cms (1½ – 2").
The fingers may be extended or interlocked, or the top hand may grip the wrist of the hand underneath.
Keep arms straight and fingers clear of chest.
Press down straight towards spine.
One rescuer: 15 compressions (80 – 100/minute) 2 full breaths.
Continue resuscitation until natural breathing starts again and pulse returns or advanced care is available.

The National Heart Foundation of New Zealand